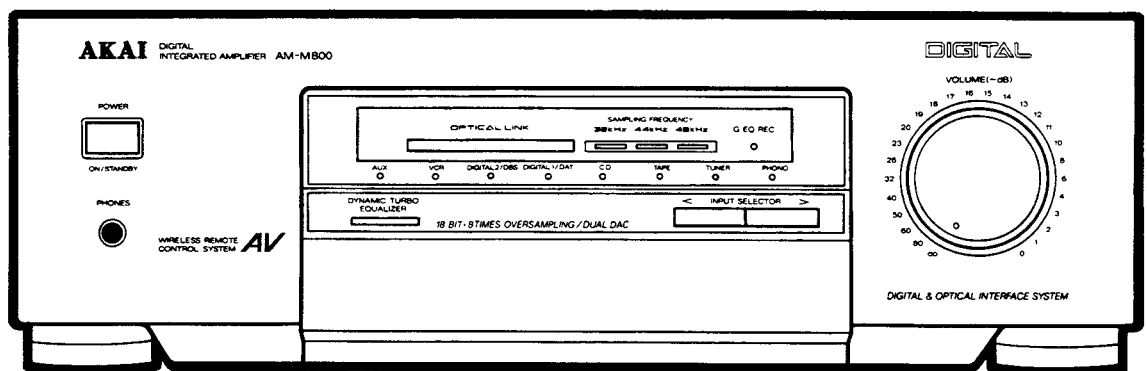
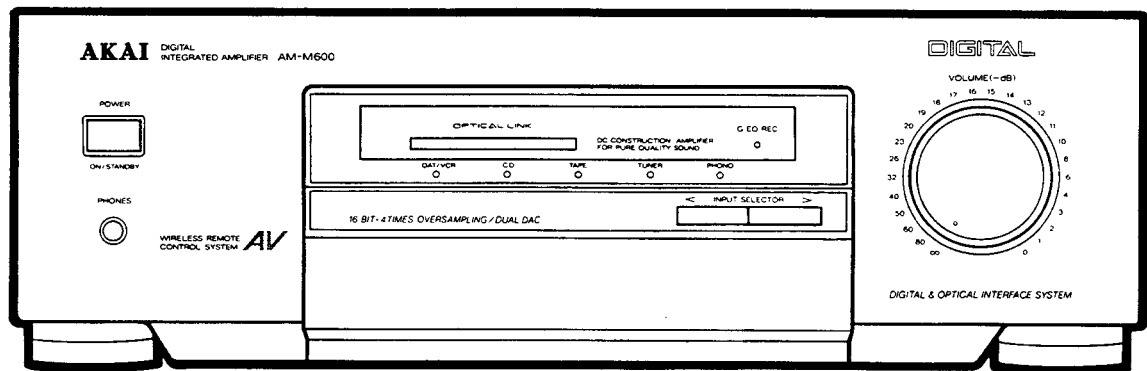


AKAI SERVICE MANUAL



MODEL AM-M800

DIGITAL INTEGRATED AMPLIFIER

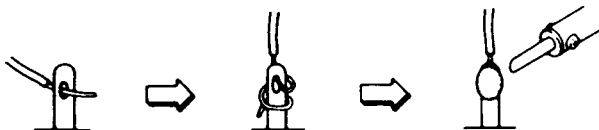
MODEL **AM-M600**

MODEL **AM-M800**

★ SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

- Parts identified by the ⚠ (*) symbol are critical for safety. Replace only with parts number specified.
- In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
These must also be replaced only with specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
- Use specified internal wiring. Note especially:
 - Wires covered with PVC tubing
 - Double insulated wires
 - High voltage leads
- Use specified insulating materials for hazardous live parts. Note especially:
 - Insulation Tape
 - PVC tubing
 - Spacers (Insulating Barriers)
 - Insulation sheets for transistors
 - Plastic screws for fixing microswitch (especially in turntable)
- When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



- Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
- Check that replaced wires do not contact sharp edged or pointed parts.
- Also check areas surrounding repaired locations.
- Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.

The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal-input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15 μ F capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC.

The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 Mohms.

★ INFORMATION

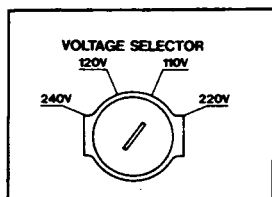
SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

| Symbols | Principal Destinations |
|-----------|------------------------|
| B | UK |
| E | Europe (except UK) |
| S | Australia |
| V | W. Germany only |
| U | Universal Area |
| Y* | Custom version |

VOLTAGE CONVERSION (**U** Model only)

Before connecting the power cord, set the VOLTAGE SELECTOR located on the rear panel so that the correct voltage for your area is indicated.



PRECAUTION BEFORE/AFTER REPAIRING THE UNIT

[ABOUT THE POWER SUPPLY]

Power supply of the AM-M600/M800 is controlled by the tuner. Therefore when repair of the AM-M600/M800 is necessary, repair should be made together with the tuner.
To repair the AM-M600/M800 without tuner, use the following procedure.

- While pushing the G.E REC button, press the POWER button to turn the power of the AM-M600/M800 on.
- To turn off the power of the AM-M600/M800, the AC power cord must be disconnected.

★ SPECIFICATIONS

MODEL AM-M600

| | |
|---|---|
| Power output | |
| FTC | 33 W × 2 (6 ohms, 40 Hz to 20 kHz, THD 0.2 %) |
| DIN | 42 W × 2 (6 ohms) |
| EIAJ | 57 W × 2 (6 ohms) |
| Music | 190 W |
| PMPO | 430 W |
| Power bandwidth | 10 Hz to 50 kHz (THD 0.1 %) |
| Total harmonic distortion .. | 0.06 % (1 kHz) |
| Phono max. input level | 50 mV (1 kHz) |
| Frequency response | 10 Hz to 100 kHz (+1.5 dB, -6.0 dB) |
| Tone control | |
| Treble | ± 8.0 dB (10 kHz) |
| Bass | ± 8.0 dB (100 Hz) |
| S/N ratio (IHF-A) | |
| PHONO (MM) | 72 dB |
| Others | 87 dB |
| Residual noise | 0.5 mV |
| Channel separation | 60 dB (1 kHz) |
| Damping factor | 20 |
| Required speaker impedance | |
| A or B | 6 to 16 ohms |
| Input sensitivity / impedance | |
| PHONO (MM) | 4 mV / 47 kohms |
| VCR, etc. | 300 mV / 47 kohms |
| Output level / impedance [DAC section] | |
| Sampling frequency | 44.1 kHz |
| Digital filter | 4 fs / 16 bit |
| D/A convertor | 18 bit / 2 DAC |
| Digital input level | |
| OPTICAL | -14 to -23 dBm |
| Frequency response | 20 Hz to 20 kHz ± 0.5 dB |
| Dynamic range | 93 dB |
| Total harmonic distortion .. | 0.04 % (1 kHz, 20 kHz LPF) |
| Power requirements | |
| AC 220 V, 50 Hz for Europe except UK | |
| AC 240 V, 50 Hz for UK and Australia | |
| AC 110 / 120 / 220 / 240 V, 50 / 60 Hz convertible for other countries. | |
| Dimensions | 360 (W) × 117 (H) × 310 (D) mm |
| Weight | 6.3 kg |
| Standard accessories | |
| Remote control unit (RC-S600) | 1 |
| Batteries | 2 |
| Operator's manual | 1 |

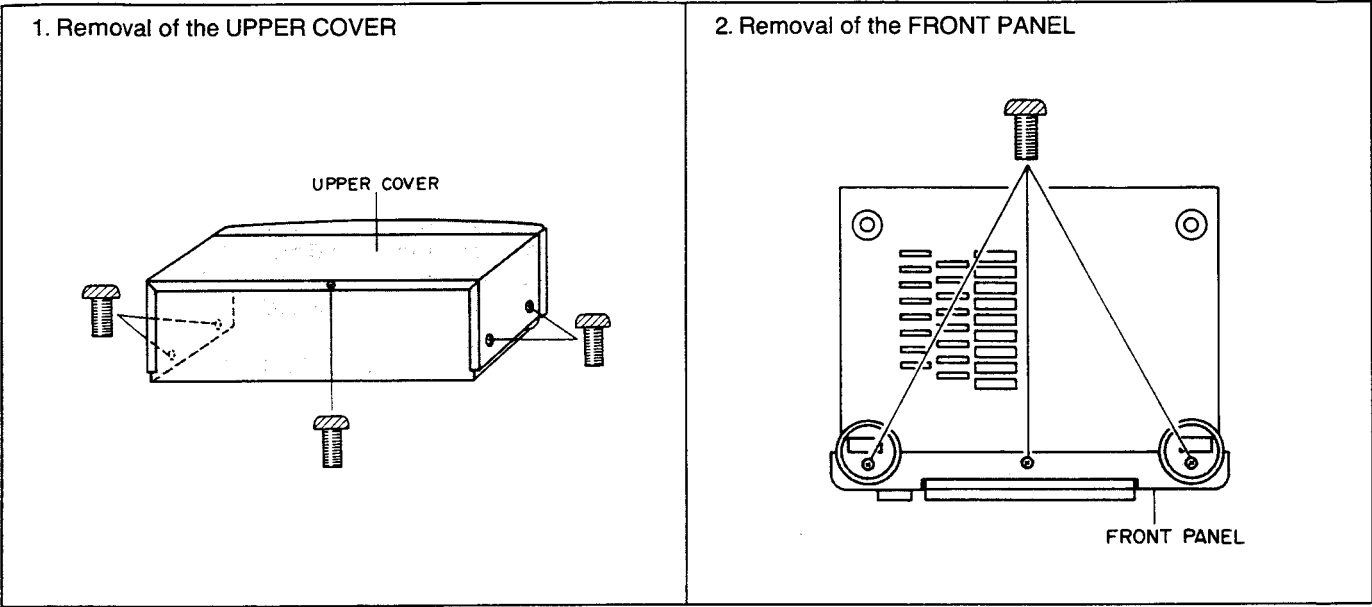
MODEL AM-M800

| | |
|---|---|
| Power output | |
| FTC | 54 W × 2 (6 ohms, 40 Hz to 20 kHz, THD 0.2 %) |
| DIN | 63 W × 2 (6 ohms) |
| EIAJ | 73 W × 2 (6 ohms) |
| Music | 280 W |
| PMPO | 670 W |
| Power bandwidth | 10 Hz to 50 kHz (THD 0.1 %) |
| Total harmonic distortion .. | 0.06 % (1 kHz) |
| Phono max. input level | 50 mV (1 kHz) |
| Frequency response | 10 Hz to 100 kHz (+1.5 dB, -6.0 dB) |
| Tone control | |
| Treble | ± 8.0 dB (10 kHz) |
| Bass | ± 8.0 dB (100 Hz) |
| S/N ratio (IHF-A) | |
| PHONO (MM) | 73 dB |
| Others | 88 dB |
| Residual noise | 0.5 mV |
| Channel separation | 60 dB (1 kHz) |
| Damping factor | 19.3 |
| Required speaker impedance | |
| A or B | 6 to 16 ohms |
| A and B | 12 to 16 ohms |
| Input sensitivity / impedance | |
| PHONO (MM) | 4 mV / 47 kohms |
| VCR, etc. | 300 mV / 47 kohms |
| Output level / impedance [DAC section] | |
| Sampling frequency | 32 / 44.1 / 48 kHz |
| Digital filter | 8 fs / 18 bit |
| D/A convertor | 18 bit / 2 DAC |
| Digital input level / impedance | |
| OPTICAL | -14 to -23 dBm |
| COAXIAL | 0.5 Vp-p / 75 ohms |
| Frequency response | 20 Hz to 20 kHz ± 0.5 dB |
| Dynamic range | 95 dB |
| Total harmonic distortion .. | 0.008 % (1 kHz, 20 kHz LPF) |
| Power requirements | |
| AC 220 V, 50 Hz for Europe except UK | |
| AC 240 V, 50 Hz for UK and Australia | |
| AC 110 / 120 / 220 / 240 V, 50 / 60 Hz convertible for other countries. | |
| Dimensions | 360 (W) × 117 (H) × 310 (D) mm |
| Weight | 6.4 kg |
| Standard accessories | |
| Remote control unit (RC-S600) | 1 |
| Batteries | 2 |
| Operator's manual | 1 |

* For improvement purposes, specifications and design are subject to change without notice.

I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in reverse order.



II. PRINCIPAL PARTS LOCATION

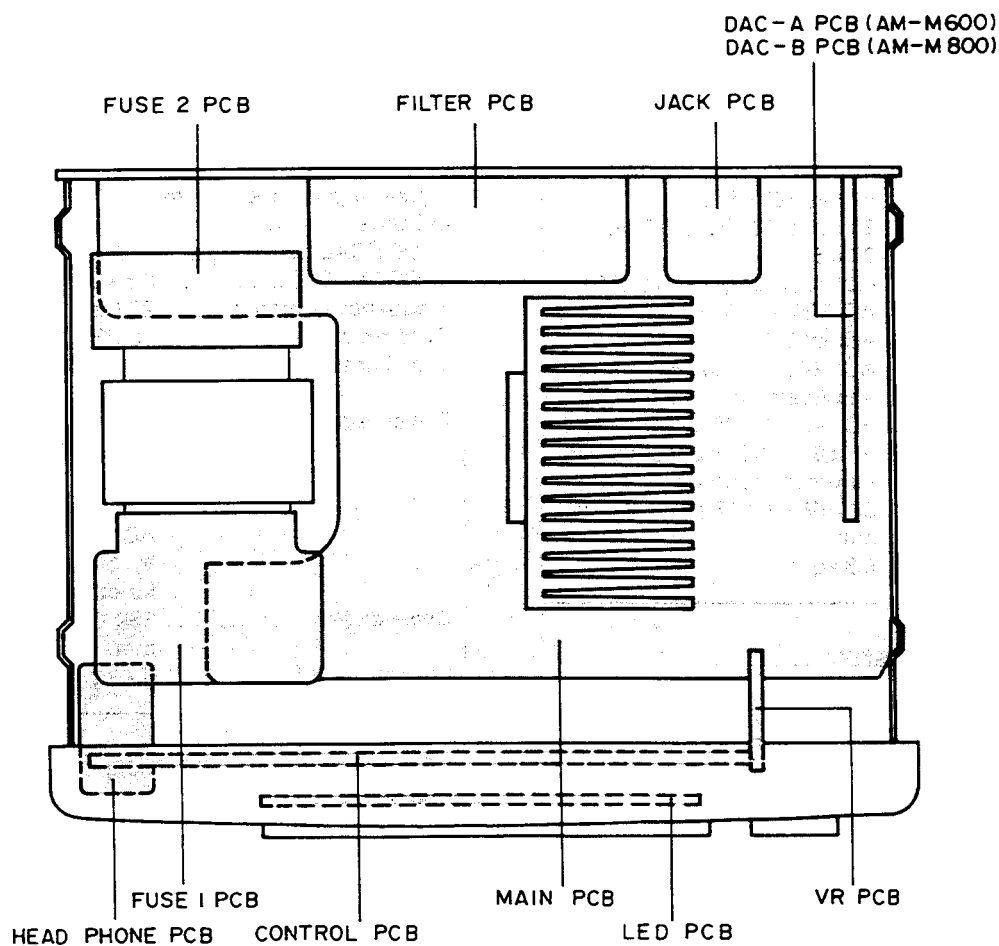


Fig. 2-1 Top view

III. PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

| Ref.No. | Part No. | Description |
|---------|---------------|--------------------|
| 1 | BH-T2023A320A | HEAD BASE BLOCK |
| 2 | HP-H2206A010A | HEAD R/P PR4-8FU C |
| 3 | ZS-477876 | PAN20×03STL CMT |
| 4 | ZS-536488 | BID20×08STL CMT |
| 5 | ZG-402895 | SP CS ANGLE ADJUST |

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

| Ref.No. | Part No. | Description |
|---------|-----------|------------------------------|
| IC1 | EI-324536 | IC HD14049BP |
| IC2 | EI-336801 | IC MB8841-564M |
| C1A | EC-338399 | C MMY V 223M 250AC [U.E.B.S] |
| C1B | EC-350949 | C MMY V 223M 250DC [J] |
| C1C | EC-338397 | C MMY V 223M 125AC [C,A] |
| X1 | EI-318384 | OSC X'TAL NC-18C |

Symbols for primary destination

[A] : AAL (U.S.A) [S] : SAA (Australia)
[B] : BEAB (England) [U] : U/T (Universa Area)
[C] : CSA (Canada)
[E] : CEE (Europe) [V] : VDE (W. Germany)
[J] : JPN (Janan) [Y] : Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

1.RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

| Ref.No. | Part No. | Description |
|---------|-------------|--|
| 1 | AX-394557M | REMOCON RC-S600 |
| 2 | *BT-394528J | TRANS POW A2067(B) [AM-M800] |
| 3 | *BT-394527J | TRANS POW A2067(E) [AM-M800] |
| 4 | *BT-394526J | TRANS POW A2067(U) [AM-M800] |
| 5 | *BT-394524J | TRANS POW A2068(B) [AM-M600] |
| 6 | *BT-394523J | TRANS POW A2068(E) [AM-M600] |
| 7 | *BT-394522J | TRANS POW A2068(U) [AM-M600] |
| 8 | ED-394509J | D LED GL3HY43 ORANGE |
| 9 | ED-382365J | D LED SLR-34VC3F RED |
| 10 | ED-394416J | D LED SLV-31VT3F RED |
| 11 | ED-307572 | D SILICON H 1SS131 |
| 12 | ED-394453J | D SILICON H 1SS92T-77 T26 |
| 13 | ED-394708J | D SILICON RBA402 200/4.0A [AM-M600] |
| 14 | ED-384278J | D SILICON RBV602 200/6.0A [AM-M800] |
| 15 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| 16 | ED-346627 | D ZENER H HZ33 2 |
| 17 | ED-331617 | D ZENER H HZ6 A3 |
| 18 | ED-346530 | D ZENER H HZ6C3L |
| 19 | ED-346604 | D ZENER H HZ7 B2 |
| 20 | ED-346535 | D ZENER H HZ7C2L |
| 21 | *EF-601301 | FUSE SEMKO T 250V 2.00A [U] |
| 22 | *EF-691007 | FUSE SEMKO T 250V 3.15A [AM-M600] |
| 23 | *EF-690996 | FUSE SEMKO T 250V 4.00A [AM-M800] |
| 24 | *EF-593706 | FUSE SEMKO T 250V 500MA |
| 25 | *EF-601942 | FUSE SEMKO T 250V 630MA |
| 26 | EI-390595J | IC AD1860N |
| 27 | EI-367572 | IC BA15218 |
| 28 | EI-382660J | IC BA15218-DX |
| 29 | EI-394932J | IC LC6520C-4406 FXAMP2 |
| 30 | EI-394508J | IC MC14051B |
| 31 | EI-361133 | IC MC14053B |
| 32 | EI-393324J | IC M5218AL |
| 33 | EI-392838J | IC PD0050 |
| 34 | EI-390594J | IC PD0052 |
| 35 | EI-381024J | IC SM5807EP |
| 36 | *EI-358554 | IC STK4152II [AM-M600] |
| 37 | *EI-366695 | IC STK4172II [AM-M800] |
| 38 | EI-332259 | IC TC4052BP [AM-M800] |
| 39 | EI-360040J1 | IC TC74HCU04AP |
| 40 | EI-394518J | IC UPD6376CX |
| 41 | EI-719635 | OSC CE KBR-4.19M 4.19MHZ |
| 42 | EQ-394450J | RELAY POW DG12D1-O(M) 12V [U] |
| 43 | *ER-200746 | R FUSE H ERD2FC 1/4W 1000G |
| 44 | *ER-332225 | R FUSE H S10 ERD2FC 1/4W 56R0G |
| 45 | *ER-331188 | R FUSE H S10 ERD2FC 1/4W 8R2J |
| 46 | ES-394512J | SW PUSH SPEA12 02-02N [AM-M800] |
| 47 | *ES-349070 | SW SELECTOR YKS11-0002 02-4 [U] |
| 48 | ES-394493J | SW TACT SOA-123HS [FUNC.DOWN] |
| 49 | ES-394513J | SW TACT SOA-143HS |
| 50 | ET-356336 | TR DTA114ES |
| 51 | ET-363953 | TR DTA114TS |
| 52 | ET-353897 | TR DTC114ES |
| 53 | ET-354371 | TR DTC124ES |
| 54 | ET-370311 | TR DTC143XS [AM-M800] |

| Ref.No. | Part No. | Description |
|---------|------------|------------------------------|
| 55 | ET-354414 | TR DTC144ES |
| 56 | ET-368249 | TR DTD114TS |
| 57 | ET-749377 | TR 2SA1048 GR |
| 58 | ET-353899 | TR 2SA1317 S,T,U |
| 59 | ET-394600J | TR 2SA684 Q,R T05 |
| 60 | ET-366365 | TR 2SB1185 E,F [U] |
| 61 | ET-373210 | TR 2SB1187 E,F |
| 62 | ET-749375 | TR 2SC2458 GR |
| 63 | ET-338410 | TR 2SC2878 A,B |
| 64 | ET-397160J | TR 2SC3330 R,S,T,U,V |
| 65 | ET-378524J | TR 2SC3383 S,T,U |
| 66 | ET-380685J | TR 2SD1761 E,F,G |
| 67 | ET-373025 | TR 2SD1944 J1,J2,K |
| 68 | EV-394517J | VR ROTARY RK11K113 SPCL W104 |
| 69 | EV-394515J | VR ROTARY RK14K1230 B103X2 |
| 70 | EV-394458J | VR SPL RK16Y12MA A104X2 |

2. P.C BOARD

| Ref.No. | Part No. | Description |
|---------|---------------|--|
| 1 | BA-A2068A020A | PC(#) MAIN AMP BLK AM-M600(U) [U] [AM-M600] |
| 2 | BA-A2068A020C | PC(#) MAIN AMP BLK AM-M600(V) [E,V,B] [AM-M600] |
| 3 | BA-A2068A020D | PC(#) MAIN AMP BLK AM-M800(U) [U] [AM-M800] |
| 4 | BA-A2068A020F | PC(#) MAIN AMP BLK AM-M800(V) [E,V,B] [AM-M800] |
| 5 | BA-A2068A040B | PC DAC-A BLK AM-M600(V) [AM-M600] |
| 6 | BA-A2067A040B | PC DAC-B BLK AM-M800(V) [AM-M800] |
| 7 | BA-A2068A030B | PC(#) CONTROL BLK AM-M600(V) [AM-M600] |
| 8 | BA-A2068A030D | PC(#) CONTROL BLK AM-M800(V) [AM-M800] |

PC (#) MAIN AMP BLK CONSISTS OF FOLLOWING P.C BOARD.

- MAIN AMP P.C BOARD
- CONNECTOR P.C BOARD
- POWER P.C BOARD
- FUSE-1 P.C BOARD
- FUSE-2 P.C BOARD

PC (#) CONTROL BLK CONSISTS OF FOLLOWING P.C BOARD.

- CONTROL P.C BOARD
- VR P.C BOARD
- PHONE P.C BOARD
- LED P.C BOARD

3. MAIN AMP P.C BOARD

| Ref.No. | Part No. | Description |
|---------|-------------|---|
| D1 | ED-394453J | D SILICON H 1SS92T-77 T26 |
| D2 | ED-346604 | D ZENER H HZ7 B2 |
| D101 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D102 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D103 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D104 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D105 | ED-346535 | D ZENER H HZ7C2L |
| D106 | ED-346535 | D ZENER H HZ7C2L |
| D107 | ED-307572 | D SILICON H 1SS131 |
| D108 | ED-307572 | D SILICON H 1SS131 |
| D109 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D110 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D111 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D112 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D113 | ED-346530 | D ZENER H HZ6C3L |
| D115 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D116 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D117 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D118 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D119 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D120 | *ED-389840J | D SILICON 1SR139-100HS F10 |
| D121 | ED-346627 | D ZENER H HZ33 2 |
| D123A | ED-394708J | D SILICON RBA402 200/4.0A [AM-M600] |
| D123B | ED-384278J | D SILICON RBV602 200/6.0A [AM-M800] |
| F101A | *EF-623125 | FUSE SEMKO T 250V 2.50A [AM-M600] |
| F101B | *EF-691007 | FUSE SEMKO T 250V 3.15A [AM-M800] |
| FR1 | *ER-200746 | R FUSE H ERD2FC 1/4W 1000G |
| FR2 | *ER-200746 | R FUSE H ERD2FC 1/4W 1000G |
| ER101 | *ER-331188 | R FUSE H S10 ERD2FC 1/4W 8R2J |
| FR102 | *ER-332225 | R FUSE H S10 ERD2FC 1/4W 56R0G |
| IC1 | EI-382660J | IC BA15218-DX |
| IC2 | EI-394508J | IC MC14051B |
| IC3 | EI-394508J | IC MC14051B |
| IC4 | EI-361133 | IC MC14053B |
| IC5 | EI-361133 | IC MC14053B |
| IC6 | EI-367572 | IC BA15218 |
| IC7 | EI-367572 | IC BA15218 [AM-M800] |
| IC8 | EI-332259 | IC TC4052BP [AM-M800] |
| IC101A | *EI-358554 | IC STK4152II [AM-M600] |
| IC101B | *EI-366695 | IC STK4172II [AM-M800] |
| J1A | EJ-394438J | PIN J YKC21-3050 SEALED 6P [E,U] |
| J1B | EJ-394437J | PIN J YKC21-3036 6P [V] |
| J2A | EJ-394436J | PIN J YKC21-3034 4P [AM-M600] |
| J2B | EJ-394437J | PIN J YKC21-3036 6P [AM-M800] |
| J3 | EJ-390597J | SOCKET 52303-1511 15P |
| J4 | EJ-394442J | SOCKET 52303-1211 12P |
| R110 | ER-333023 | R OMF H S20 FS 2W 100J |
| R111 | ER-333023 | R OMF H S20 FS 2W 100J |
| TM1A | EJ-349417 | TERMINAL LEVER YKD21-0026 4P [AM-M600] |
| TM1B | EJ-349401 | TERMINAL LEVER YKD21-0027 8P [AM-M800] |
| TR1 | ET-368249 | TR DTD114TS |
| TR4 | ET-356336 | TR DTA114ES |
| TR5 | ET-354371 | TR DTC124ES |
| TR6 | ET-354371 | TR DTC124ES |
| TR101 | ET-354371 | TR DTC124ES |
| TR102 | ET-380685J | TR 2SD1761 E,F,G |
| TR103 | ET-373210 | TR 2SB1187 E,F |
| TR104 | ET-373025 | TR 2SD1944 J1,J2,K |
| TR105 | ET-373210 | TR 2SB1187 E,F |
| TR106 | ET-749377 | TR 2SA1048 GR |

4. DAC-A P.C BOARD (AM-M600)

| Ref.No. | Part No. | Description |
|---------|------------|--------------------------------|
| D1 | ED-307572 | D SILICON H 1SS131 |
| D2 | ED-307572 | D SILICON H 1SS131 |
| D3 | ED-331617 | D ZENER H HZ6 A3 |
| D4 | ED-307572 | D SILICON H 1SS131 |
| D5 | ED-307572 | D SILICON H 1SS131 |
| FL1 | EH-386589J | FILTER EMI FBA04HA600AB-00 T26 |
| FL2 | EH-386589J | FILTER EMI FBA04HA600AB-00 T26 |
| FL3 | EH-386589J | FILTER EMI FBA04HA600AB-00 T26 |
| FL4 | EH-395074J | FILTER EMI FBA04HA600VB-00 T05 |
| IC1 | EI-390594J | IC PD0052 |
| IC2 | EI-381024J | IC SM5807EP |
| IC3 | EI-394518J | IC UPD6376CX |
| IC4 | EI-393324J | IC M5218AL |
| J1 | EJ-394459J | SOCKET OPTICAL GP1F32R |
| TR1 | ET-378524J | TR 2SC3383 S,T,U |
| TR2 | ET-354414 | TR DTC144ES |
| TR3 | ET-356336 | TR DTA114ES |
| TR4 | ET-354414 | TR DTC144ES |
| TR5 | ET-356336 | TR DTA114ES |
| TR6 | ET-354414 | TR DTC144ES |
| TR7 | ET-394600J | TR 2SA684 Q,R T05 |
| TR8 | ET-749375 | TR 2SC2458 GR |
| TR9 | ET-749375 | TR 2SC2458 GR |
| TR10 | ET-749375 | TR 2SC2458 GR |
| TR11 | ET-749375 | TR 2SC2458 GR |
| TR12 | ET-354414 | TR DTC144ES |
| TR13 | ET-354414 | TR DTC144ES |
| TR14 | ET-749375 | TR 2SC2458 GR |

5. DAC-B P.C BOARD (AM-M800)

| Ref.No. | Part No. | Description |
|---------|-------------|--------------------------------|
| D1 | ED-307572 | D SILICON H 1SS131 |
| D2 | ED-307572 | D SILICON H 1SS131 |
| D3 | ED-307572 | D SILICON H 1SS131 |
| FL1 | EH-395074J | FILTER EMI FBA04HA600VB-00 T05 |
| FL2 | EH-386589J | FILTER EMI FBA04HA600AB-00 T26 |
| FL3 | EH-386589J | FILTER EMI FBA04HA600AB-00 T26 |
| FL4 | EH-395074J | FILTER EMI FBA04HA600VB-00 T05 |
| IC1 | EI-360040J1 | IC TC74HCU04AP |
| IC2 | EI-390594J | IC PD0052 |
| IC3 | EI-392838J | IC PD0050 |
| IC4 | EI-390595J | IC AD1860N |
| IC5 | EI-390595J | IC AD1860N |
| IC6 | EI-393324J | IC M5218AL |
| J1 | EJ-394459J | SOCKET OPTICAL GP1F32R |
| J4 | EJ-394461J | PIN J *A2076-1 3P |
| J5 | EJ-390593J | PIN J *A2076-2 3P |
| T1 | BT-368261 | TRANS PULSE TC-1027-04 |
| TR1 | ET-354414 | TR DTC144ES |
| TR2 | ET-354414 | TR DTC144ES |
| TR3 | ET-356336 | TR DTA114ES |
| TR4 | ET-354414 | TR DTC144ES |
| TR5 | ET-356336 | TR DTA114ES |
| TR6 | ET-749375 | TR 2SC2458 GR |
| TR7 | ET-749375 | TR 2SC2458 GR |
| TR8 | ET-749375 | TR 2SC2458 GR |
| TR9 | ET-749375 | TR 2SC2458 GR |

6. CONTROL P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|----------------------|
| D501 | ED-307572 | D SILICON H 1SS131 |
| D502 | ED-307572 | D SILICON H 1SS131 |
| D504 | ED-307572 | D SILICON H 1SS131 |
| D505 | ED-307572 | D SILICON H 1SS131 |
| D506 | ED-307572 | D SILICON H 1SS131 |
| D507 | ED-307572 | D SILICON H 1SS131 |
| D508 | ED-394509J | D LED GL3HY43 ORANGE |

| Ref.No. | Part No. | Description |
|---------|------------|------------------------------------|
| D509 | ED-394509J | D LED GL3HY43 ORANGE |
| D510 | ED-394509J | D LED GL3HY43 ORANGE |
| D511 | ED-394416J | D LED SLV-31VT3F RED |
| D512 | ED-394416J | D LED SLV-31VT3F RED |
| D513 | ED-394416J | D LED SLV-31VT3F RED |
| D514 | ED-394416J | D LED SLV-31VT3F RED |
| D515 | ED-382365J | D LED SLR-34VC3F RED |
| D516 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D517 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D518 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| IC501 | EI-367572 | IC BA15218 |
| IC502 | EI-367572 | IC BA15218 |
| IC503 | EI-394932J | IC LC6520C-4406 FXAMP2 |
| SW501 | ES-394512J | SW PUSH SPEA12 02-02N [AM-M800] |
| SW502 | ES-394512J | SW PUSH SPEA12 02-02N [AM-M800] |
| TR501 | ET-353897 | TR DTC114ES |
| TR502 | ET-354371 | TR DTC124ES |
| TR503 | ET-356336 | TR DTA114ES |
| TR504 | ET-353897 | TR DTC114ES |
| TR505 | ET-353897 | TR DTC114ES |
| TR506 | ET-353897 | TR DTC114ES |
| TR507 | ET-363953 | TR DTA114TS |
| TR508 | ET-363953 | TR DTA114TS |
| TR509 | ET-363953 | TR DTA114TS |
| TR510 | ET-363953 | TR DTA114TS |
| TR511 | ET-354414 | TR DTC144ES |
| TR512 | ET-749377 | TR 2SA1048 GR |
| TR513 | ET-749375 | TR 2SC2458 GR |
| TR514 | ET-370311 | TR DTC143XS [AM-M800] |
| TR515 | ET-338410 | TR 2SC2878 A,B |
| TS501 | ES-394513J | SW TACT SOA-143HS |
| TS502 | ES-394513J | SW TACT SOA-143HS |
| VR501 | EV-394515J | VR ROTARY RK14K1230 B103X2 |
| VR502 | EV-394515J | VR ROTARY RK14K1230 B103X2 |
| VR503 | EV-394517J | VR ROTARY RK11K113 SPCL W104 |
| X501 | EI-719635 | OSC CE KBR-4.19M 4.19MHZ |

7. VR P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|---------------------------|
| D601 | ED-394453J | D SILICON H 1SS92T-77 T26 |
| TR601 | ET-353899 | TR 2SA1317 S,T,U |
| TR602 | ET-353899 | TR 2SA1317 S,T,U |
| TR603 | ET-397160J | TR 2SC3330 R,S,T,U,V |
| TR604 | ET-397160J | TR 2SC3330 R,S,T,U,V |
| VR601 | EV-394458J | VR SPL RK16Y12MA A104X2 |

8. CONNECTOR P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|-----------------------|
| J201 | EJ-394445J | SOCKET 52303-1411 14P |

9. PHONE P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|--|
| J801A | EJ-394455J | PHONE J 3P YKB21-5006 6.3 [AM-M600] |
| J801B | EJ-355011 | PHONE J 3P YKB21-5010 6.3 [AM-M800] |
| R801 | ER-325843 | R OMF H S15 FS 1W 391J |

10. LED P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|--------------------------------------|
| D701 | ED-394509J | D LED GL3HY43 ORANGE |
| D702 | ED-394509J | D LED GL3HY43 ORANGE |
| D703 | ED-394509J | D LED GL3HY43 ORANGE |
| D704 | ED-394509J | D LED GL3HY43 ORANGE |
| D705 | ED-394509J | D LED GL3HY43 ORANGE |
| D706 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D707 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D708 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D709 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D710 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| D711 | ED-394509J | D LED GL3HY43 ORANGE [AM-M800] |
| TS701 | ES-394493J | SW TACT SOA-123HS [FUNC.DOWN] |
| TS702 | ES-394493J | SW TACT SOA-123HS [FUNC.UP] |
| TS703 | ES-394493J | SW TACT SOA-123HS [AM-M800,TURBO] |

11. POWER P.C BOARD

| Ref.No. | Part No. | Description |
|---------|-------------|----------------------------------|
| D301 | ED-346558 | D ZENER H HZ12B1L [U] |
| D302 | ED-307572 | D SILICON H 1SS131 [U] |
| D303 | ED-307572 | D SILICON H 1SS131 [U] |
| D304 | ED-307572 | D SILICON H 1SS131 [U] |
| F301 | *EF-601301 | FUSE SEMKO T 250V 2.00A [U] |
| F302 | *EF-601301 | FUSE SEMKO T 250V 2.00A [U] |
| J301 | *EJ-384277J | SOCKET OUTLET M7037 2P [U] |
| L301 | *EO-338409 | COIL LF FKOB160MH02 250UH |
| RL301 | EQ-394450J | RELAY POW DG12D1-Q(M) 12V [U] |
| TR301 | ET-356336 | TR DTA114ES [U] |
| TR302 | ET-354371 | TR DTC124ES [U] |
| TR303 | ET-749375 | TR 2SC2458 GR [U] |
| TR304 | ET-366365 | TR 2SB1185 E,F [U] |

12. FUSE-1 P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|--------------------------------------|
| F401A | *EF-691007 | FUSE SEMKO T 250V 3.15A [AM-M600] |
| F401B | *EF-690996 | FUSE SEMKO T 250V 4.00A [AM-M800] |
| F402A | *EF-691007 | FUSE SEMKO T 250V 3.15A [AM-M600] |
| F402B | *EF-690996 | FUSE SEMKO T 250V 4.00A [AM-M800] |
| F403 | *EF-593706 | FUSE SEMKO T 250V 500MA |
| F404 | *EF-593706 | FUSE SEMKO T 250V 500MA |
| F405 | *EF-601942 | FUSE SEMKO T 250V 630MA |

13. FUSE-2 P.C BOARD

| Ref.No. | Part No. | Description |
|---------|------------|-------------------------|
| F406 | *EF-601942 | FUSE SEMKO T 250V 630MA |
| F407 | *EF-601942 | FUSE SEMKO T 250V 630MA |
| F408 | *EF-601301 | FUSE SEMKO T 250V 2.00A |

14. FINAL ASSEMBLY

| Ref.No. | Part No. | Description |
|---------|---------------|------------------------------------|
| 1A | BD-A2068A050A | PANEL FRONT BLK AM-M600-B |
| 1B | BD-A2068A050B | PANEL FRONT BLK AM-M800-B |
| 2 | SK-394133M | BUTTON POW |
| 3 | SK-394100M | BUTTON INPUT |
| 4 | SK-394101M | BUTTON DYNAMIC [AM-M800] |
| 5 | SE-395118M | PLATE MASK [AM-M800] |
| 6 | SE-394119M | LENS OPTICAL |
| 7 | SK-394132M | BUTTON SP [AM-M800] |
| 8 | SK-394097M | KNOB VR |
| 9 | SK-394131M | KNOB TONE |
| 10 | SZ-394137M | DOOR |
| 11 | SE-394190M | PLATE FOOT |
| 12 | ZW-394496J | CANOE CLIP NO.74 |
| 13 | SA-394136M | CUSHION FOOT |
| 14 | SA-394127M | FOOT REAR |
| 15A | SP-394107M | PANEL REAR AM-M600(U) |
| 15B | SP-394106M | PANEL REAR AM-M600(E) |
| 15C | SP-395832M | PANEL REAR AM-M600(V) |
| 15D | SP-394368M | PANEL REAR AM-M600(B) |
| 15E | SP-394109M | PANEL REAR AM-M800(U) |
| 15F | SP-394108M | PANEL REAR AM-M800(E) |
| 15G | SP-395833M | PANEL REAR AM-M800(V) |
| 15H | SP-394369M | PANEL REAR AM-M800(B) |
| 16 | EJ-394538J | TERMINAL W/S 0033-208-0-00 |
| 17 | *ES-349070 | SW SELECTOR YKS11-0002 02-4 [U] |
| 18 | SC-394094M | COVER UPPER AM |
| 19 | EJ-394657J | PLUG SHORT-PIN CNT31-0074 |
| 20A | *BT-394522J | TRANS POW A2068(U) [AM-M600] |
| 20B | *BT-394523J | TRANS POW A2068(E) [AM-M600] |
| 20C | *BT-394524J | TRANS POW A2068(B) [AM-M600] |
| 20D | *BT-394526J | TRANS POW A2067(U) [AM-M800] |
| 20E | *BT-394527J | TRANS POW A2067(E) [AM-M800] |
| 20F | *BT-394528J | TRANS POW A2067(B) [AM-M800] |
| 21A | *EW-374894 | AC CORD 2C VM-0129A,VFF U/T |
| 21B | *EW-347897 | AC CORD 2 CORES VM0364,LCFL EV |
| 21C | *EW-346249 | AC CORD 2 CORES LCFL2X0.75 B |
| 22 | *EZ-371605 | BUSH CORD 2271 |
| 23 | ZS-387983J | ST BID30X08STL BNI EARTH LOCK |
| 24 | ZS-331182 | BT BID30X08STL BNI |
| 25 | ZS-346742 | ST BID40X08STL CMT CUP |

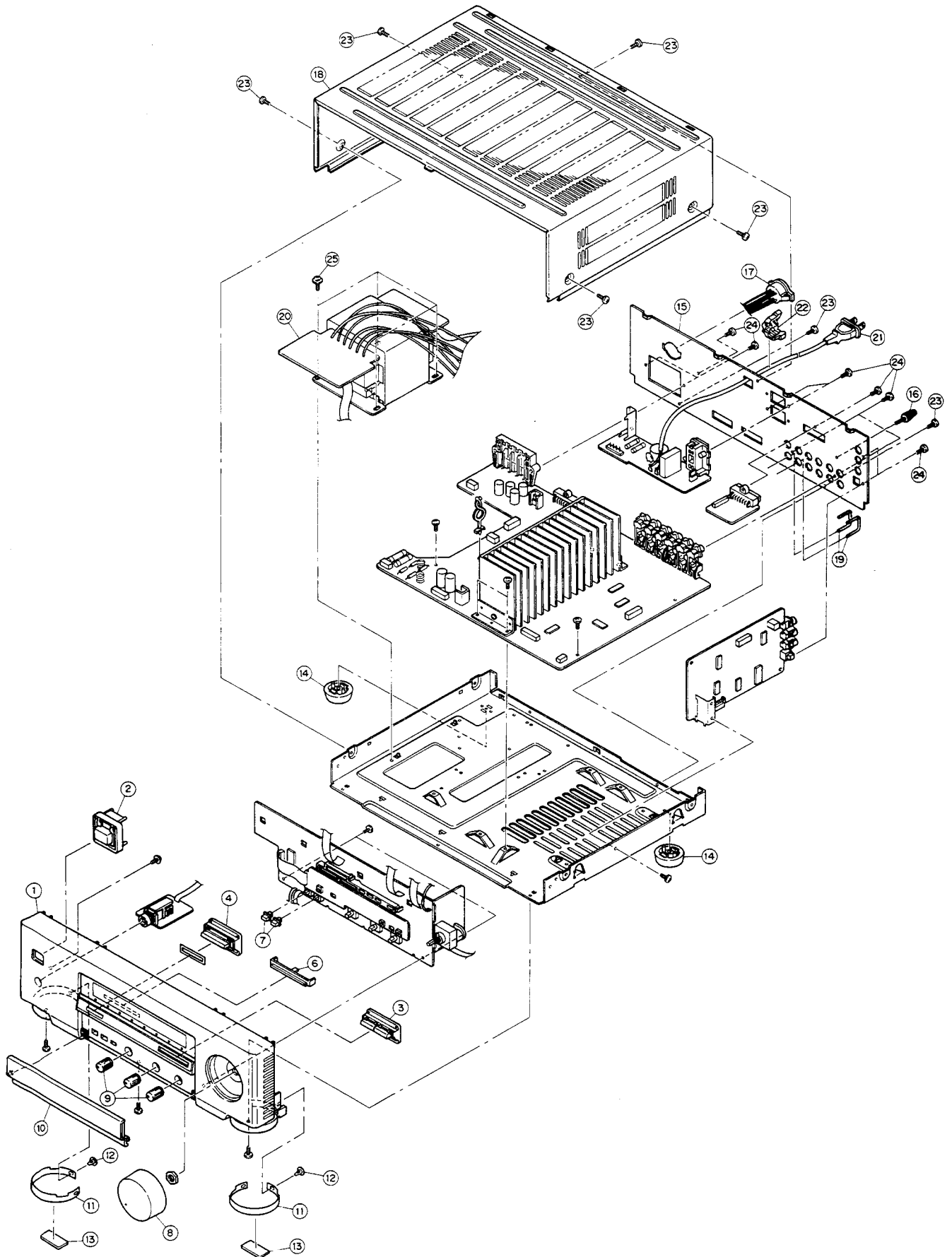
NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

15. ACCESSARY

| Ref.No. | Part No. | Description |
|---------|------------|-----------------|
| 1 | AX-394557M | REMOCON RC-S600 |

FINAL ASSEMBLY



MEMO

ABBREVIATIONS (AMPLIFIER)

| ABBREVIATION | EXPLANATION |
|--------------|-----------------------------|
| A | Analog |
| AC | Alternating Current |
| AMP | AMPlifier |
| CD | Compact Disc |
| COM | COMmon |
| D | Digital |
| D/A | Digital to Analog |
| DAC | Digital to Analog Converter |
| DAT | Digital Audio Tape recorder |
| DC | Direct Current |
| GND | GrouND |
| L | Left |
| LED | Light Emitting Diode |
| MC | Moving Coil |
| MM | Moving Magnet |
| PCB | Printed Circuit Board |
| R | Right |
| REG | REGulator |
| REC | RECORD |
| TR | TRansistor |
| SW | SWitch |
| V.AMP | Voltage AMPlifier |
| V.DISC | Video DISC |
| VR | Variable Resistance |
| VTR | Video Tape Recorder |

AKAI

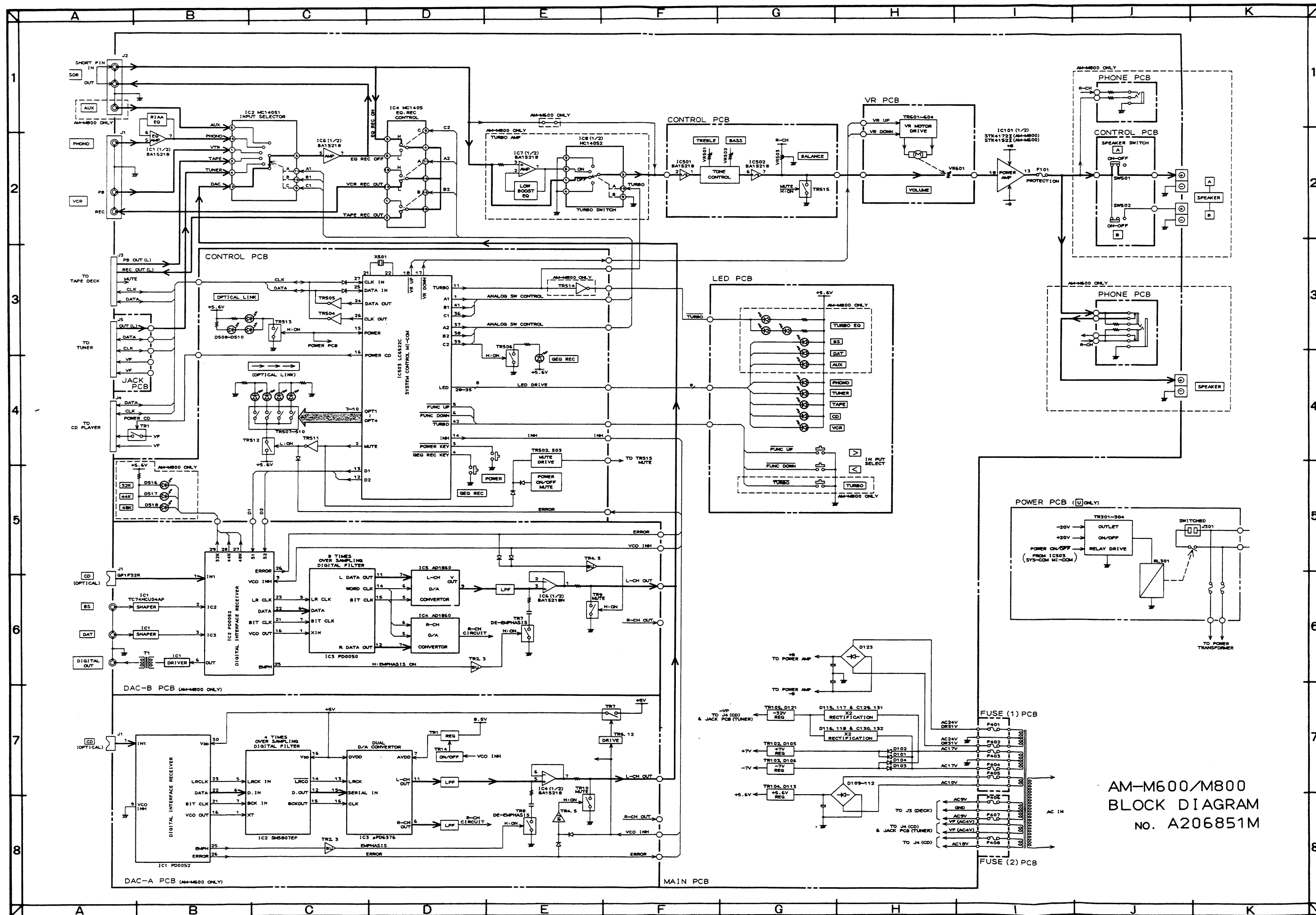
MODEL AM-M600

MODEL AM-M800

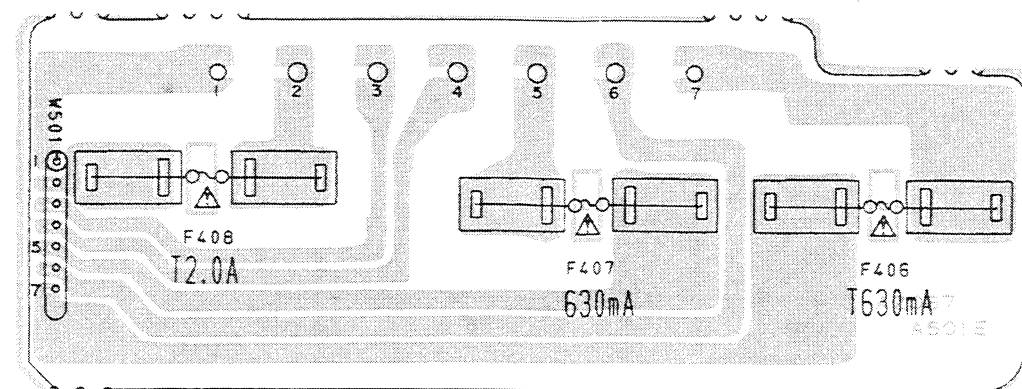
SCHEMATIC DIAGRAMS AND PC BOARDS

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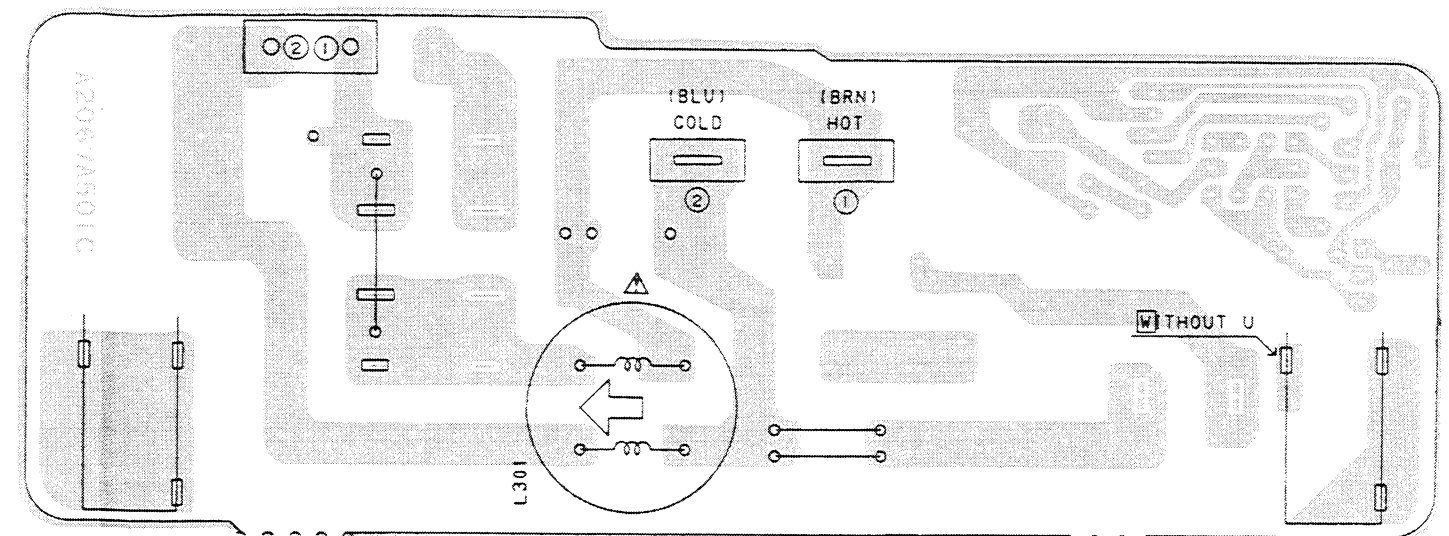
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| 1. BLOCK DIAGRAM | 3 |
| 2. FUSE 1 AND OTHER PC BOARDS | 4 |
| 3. CONNECTION DIAGRAM | 5 |
| 4. MAIN SCHEMATIC DIAGRAM | 6 |
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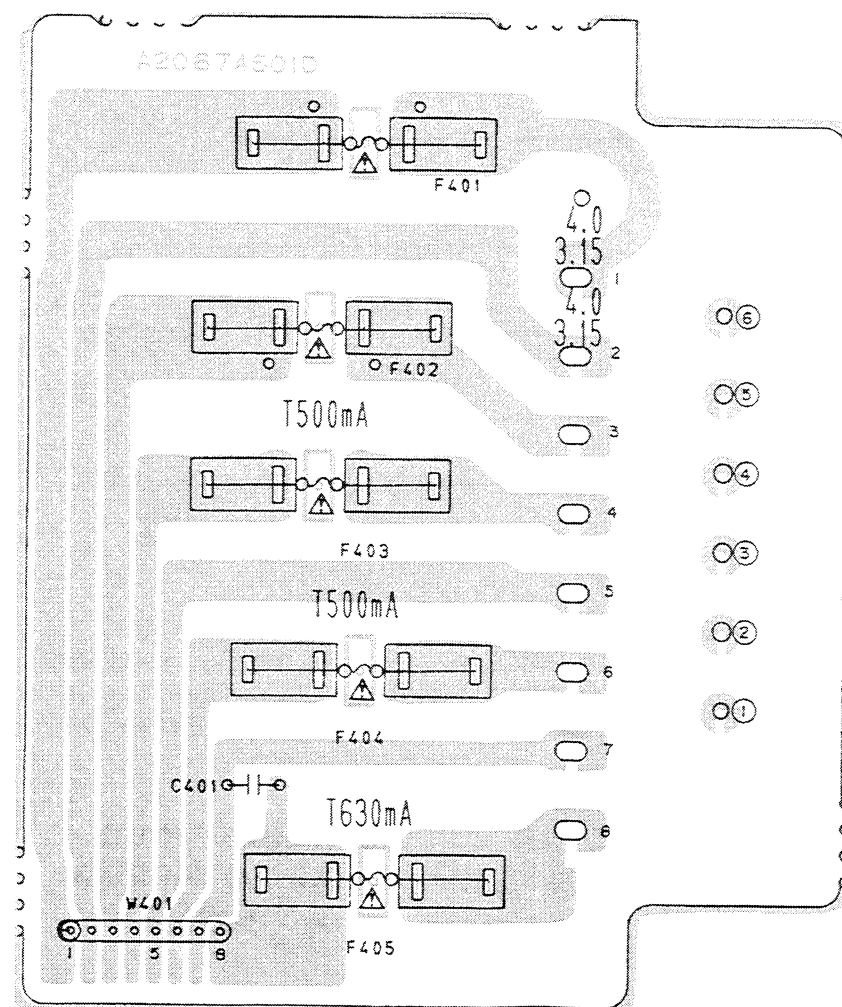
AM-M600/M800
BLOCK DIAGRAM
NO. A206851M



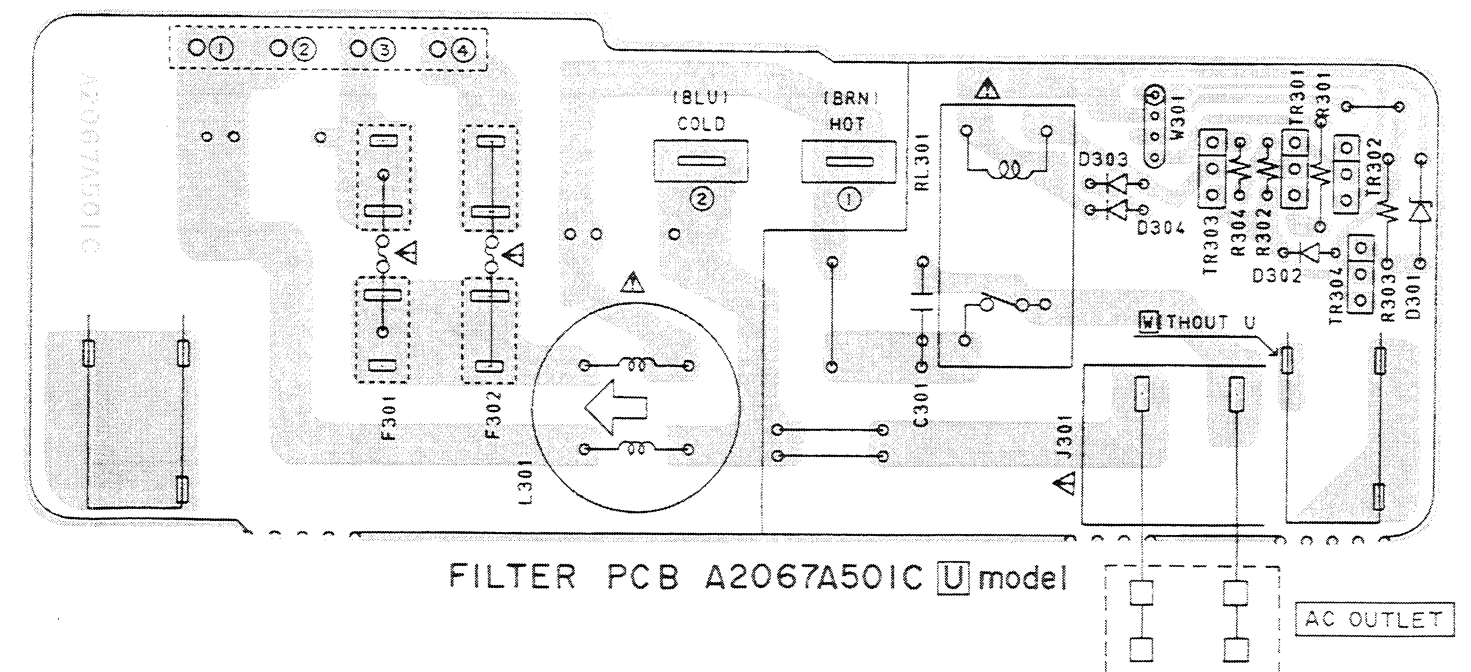
FUSE 2 PCB A2067A501E



FILTER PCB A2067A501C **B E V** model

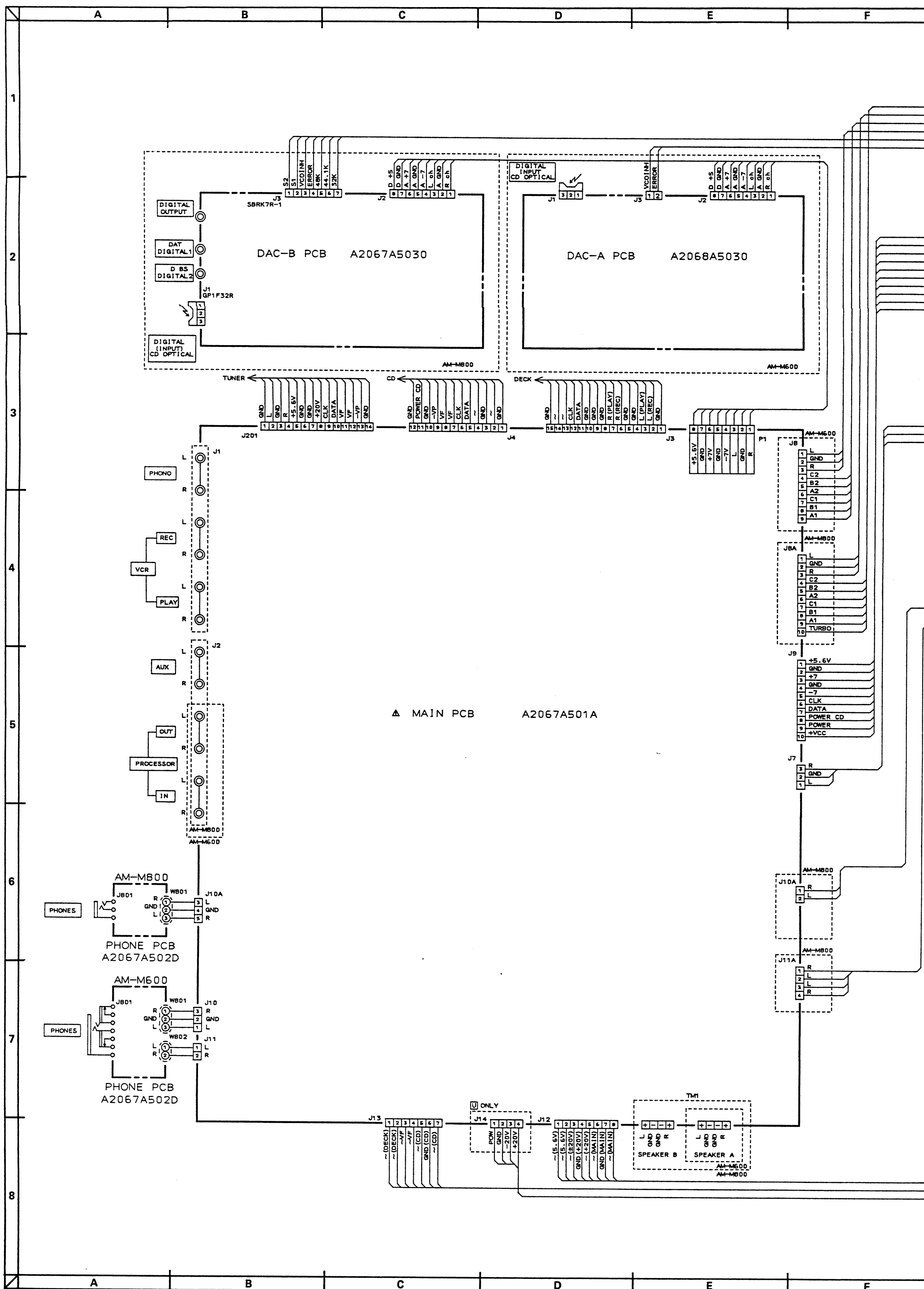


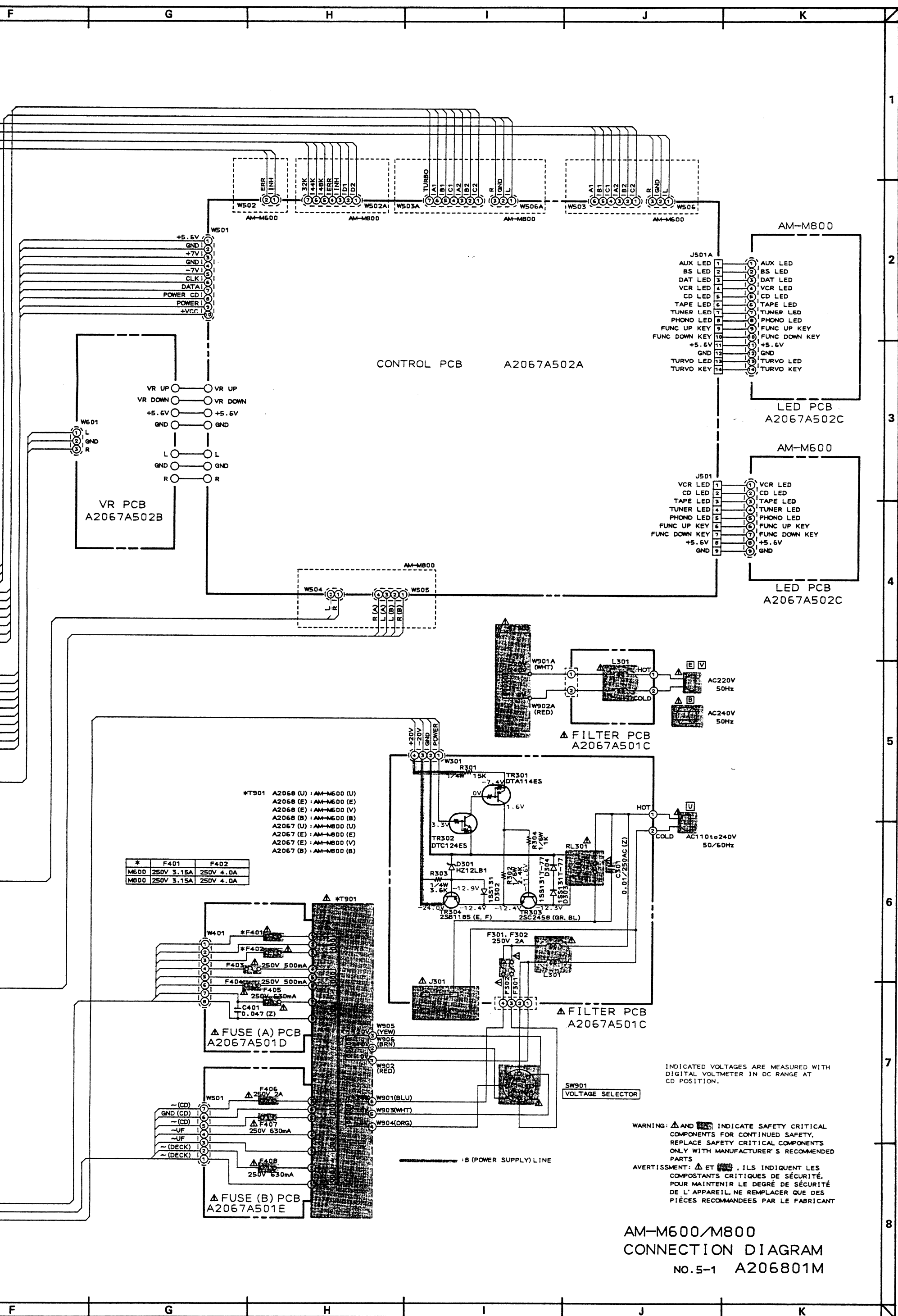
FUSE 1 PCB A2067A501D

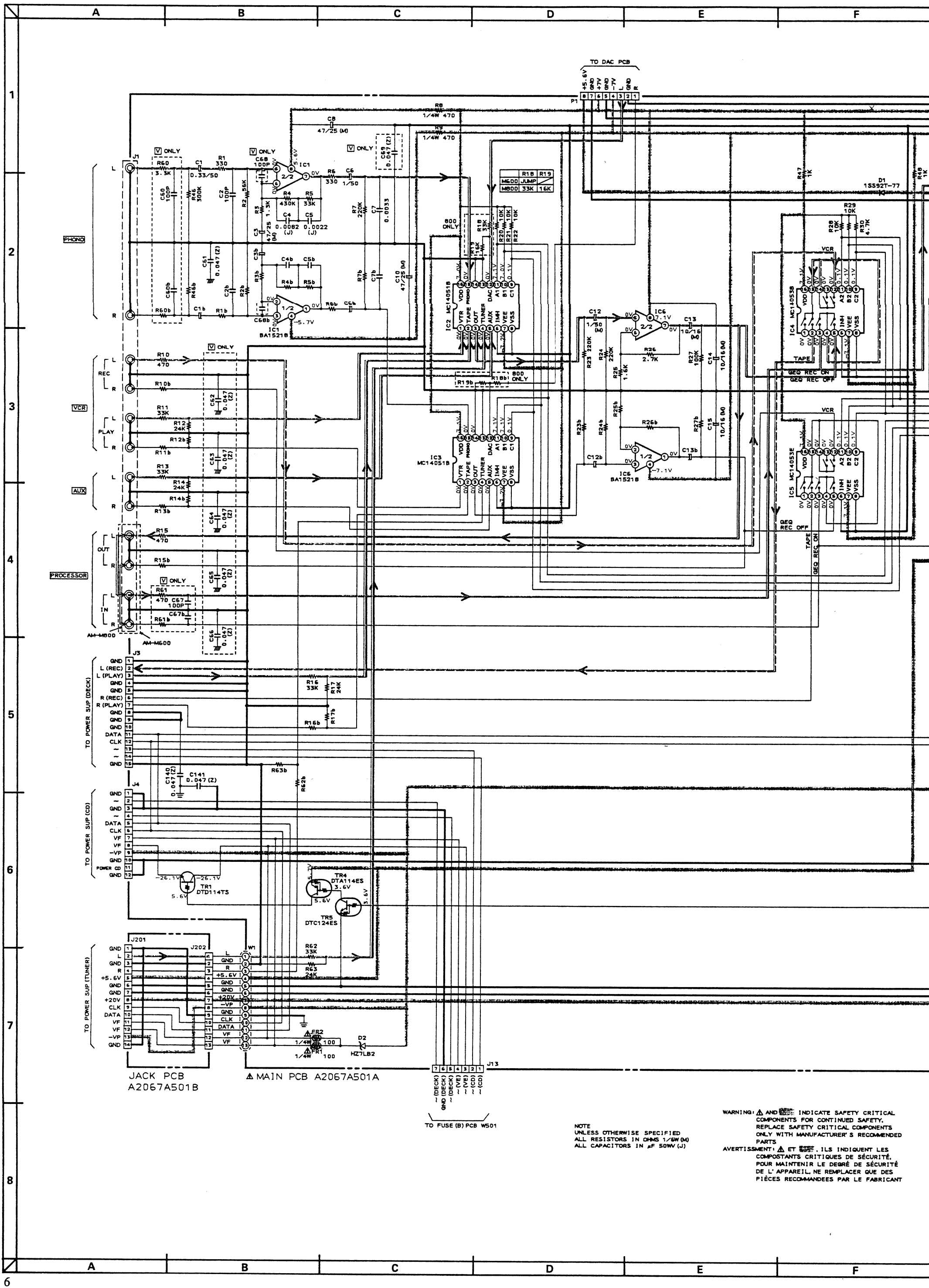


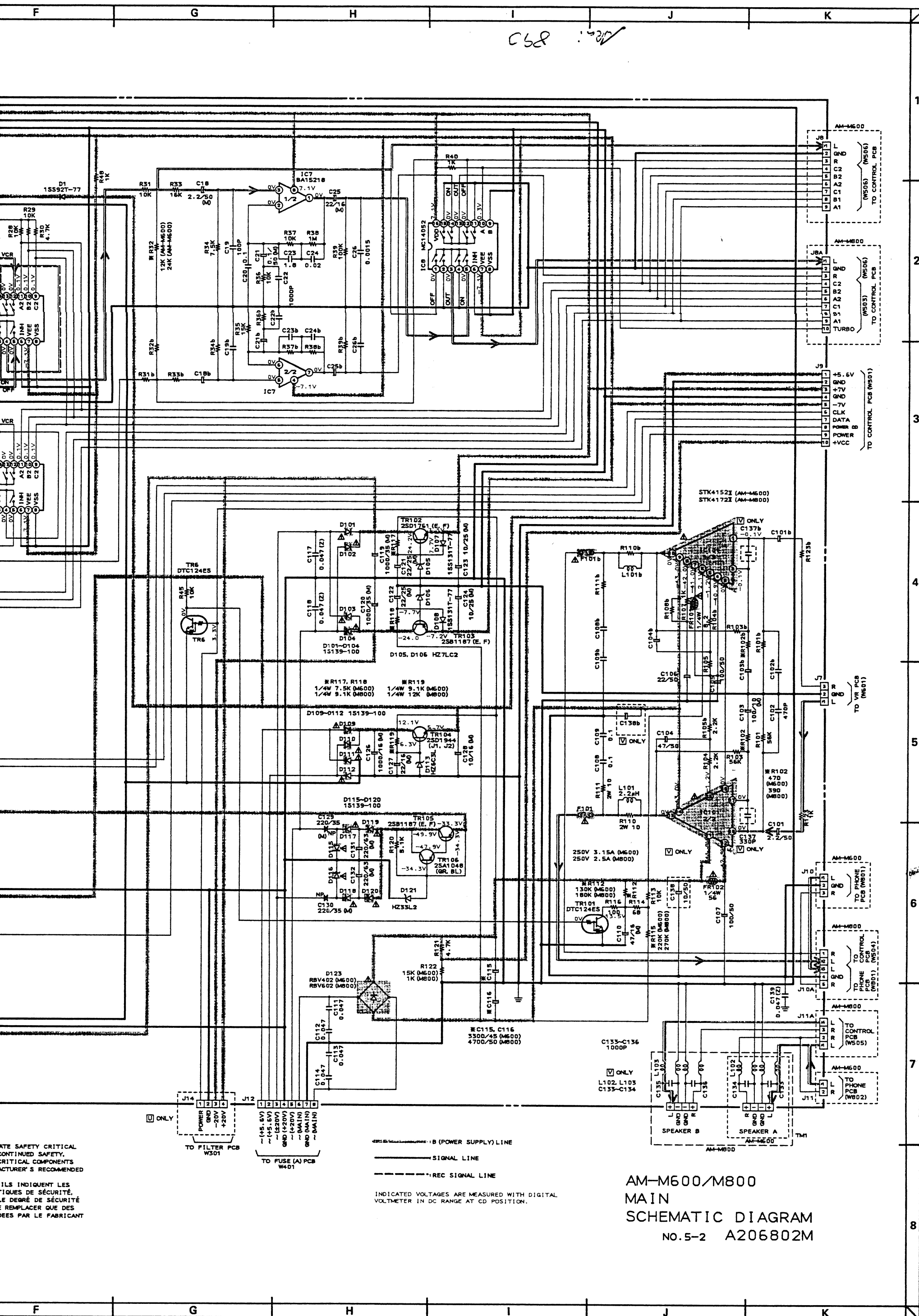
FILTER PCB A2067A501C **U** model

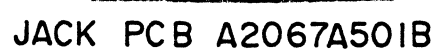
WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
 AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.





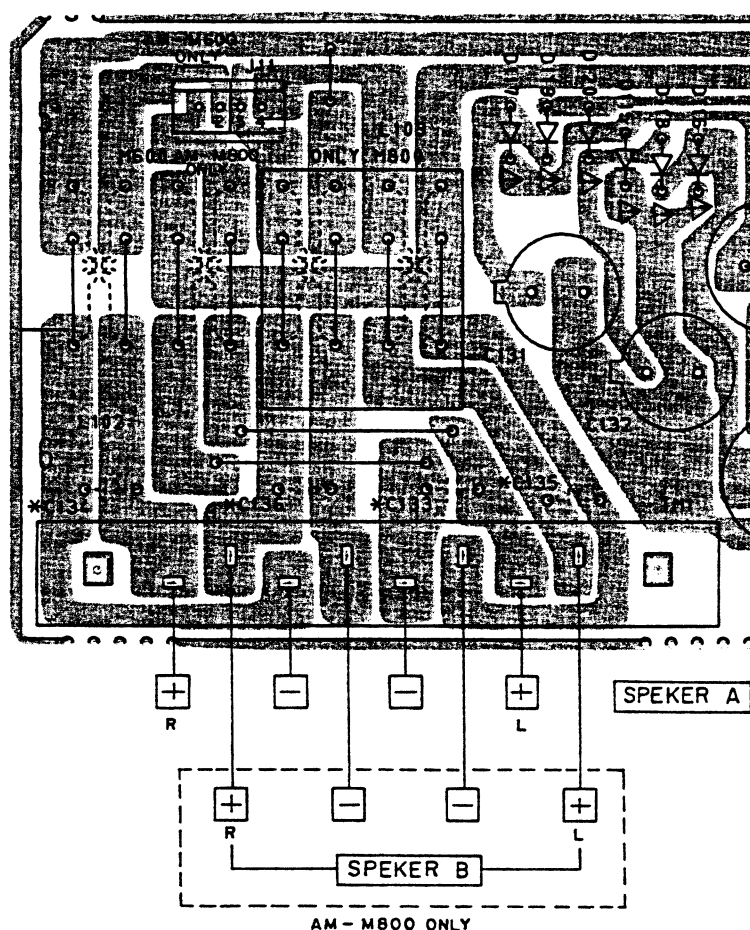






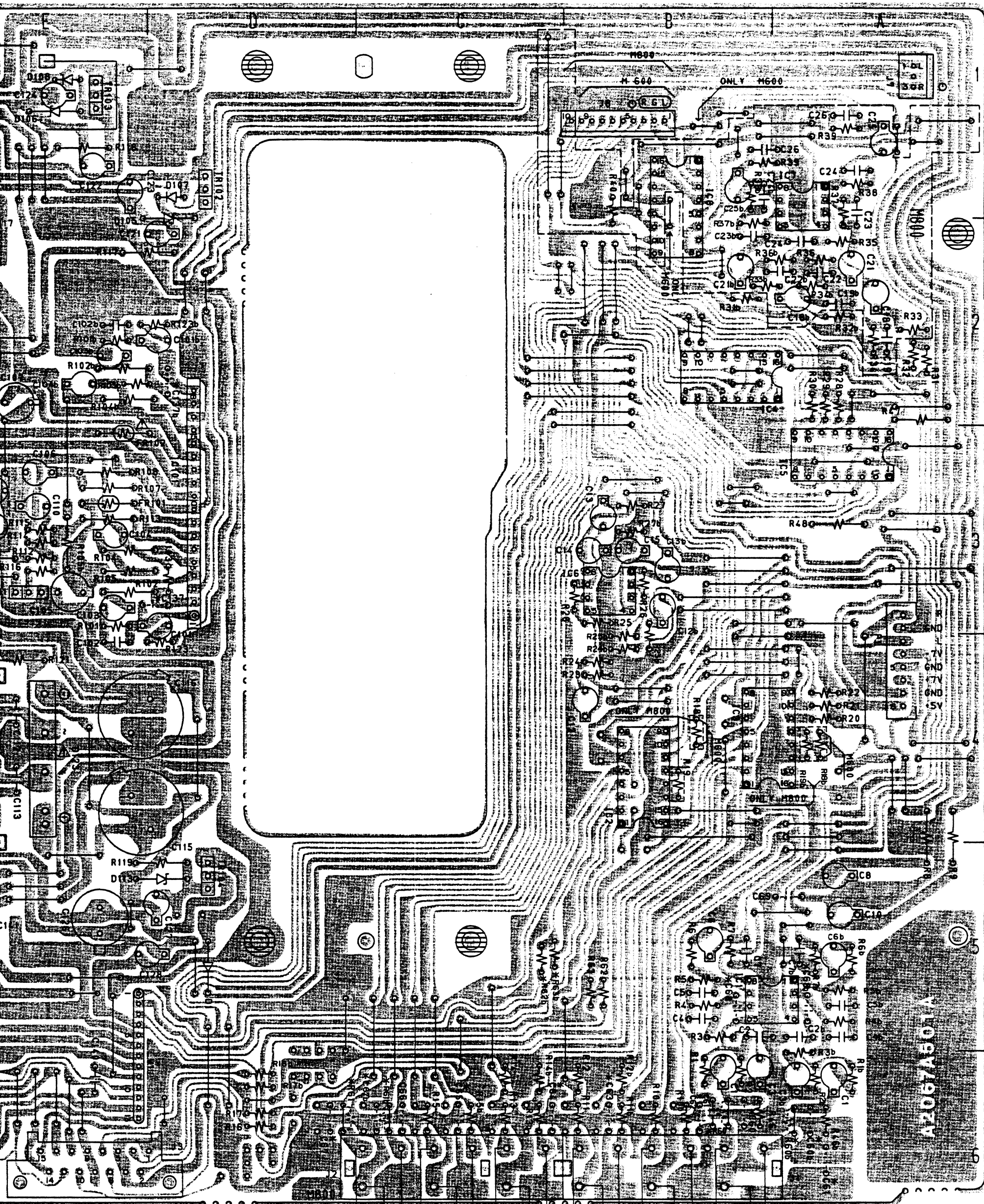
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|--------------|--------------|--------------|
| TRANSISTORS | ICS | WIRE |
| TR1.....F6 | IC1.....A5 | W1.....E5,6 |
| TR4.....F6 | IC2.....B4 | |
| TR5.....F6 | IC3.....A,B4 | CONNECTORS |
| TR6.....F2 | IC4.....B2 | J1.....B6 |
| TR101.....E3 | IC5.....A3 | J2.....C6 |
| TR102.....D1 | IC6.....B3 | J3.....E6 |
| TR103.....E1 | IC7.....A1,2 | J4.....F6 |
| TR104.....D5 | IC8.....B1,2 | J7.....A1 |
| TR105.....F6 | IC101.....D3 | J8.....B1 |
| TR106.....F5 | | J9.....E,F1 |
| | | J10.....G1 |
| | | J11.....G6 |
| | | J12.....E4 |
| | | J13.....F4,5 |
| | | J14.....F4 |
| | | P1.....A3,4 |

* Indicated ---+|--- are ☐ V model only



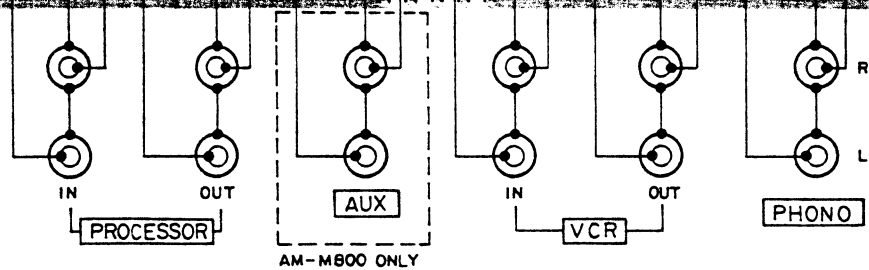
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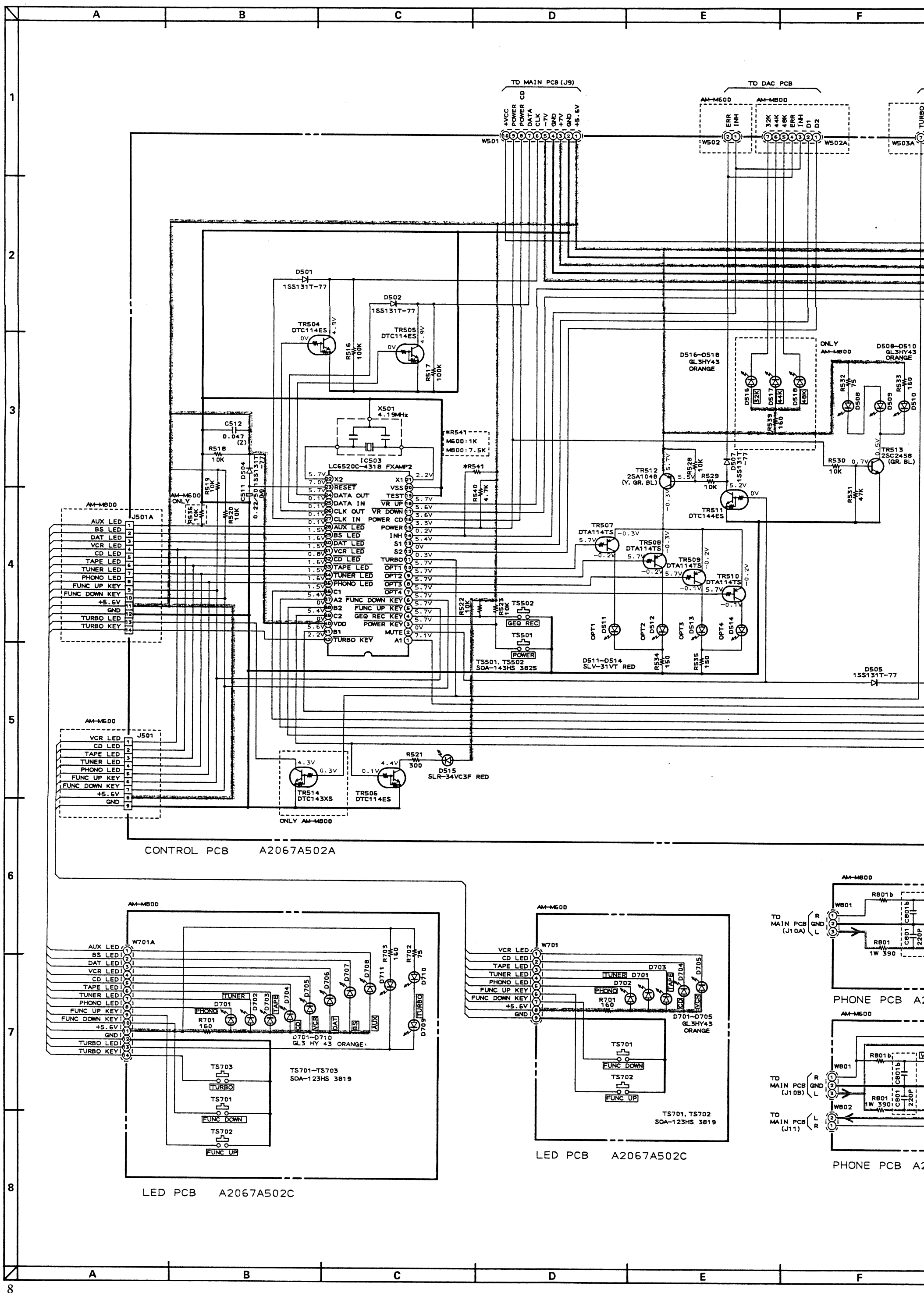
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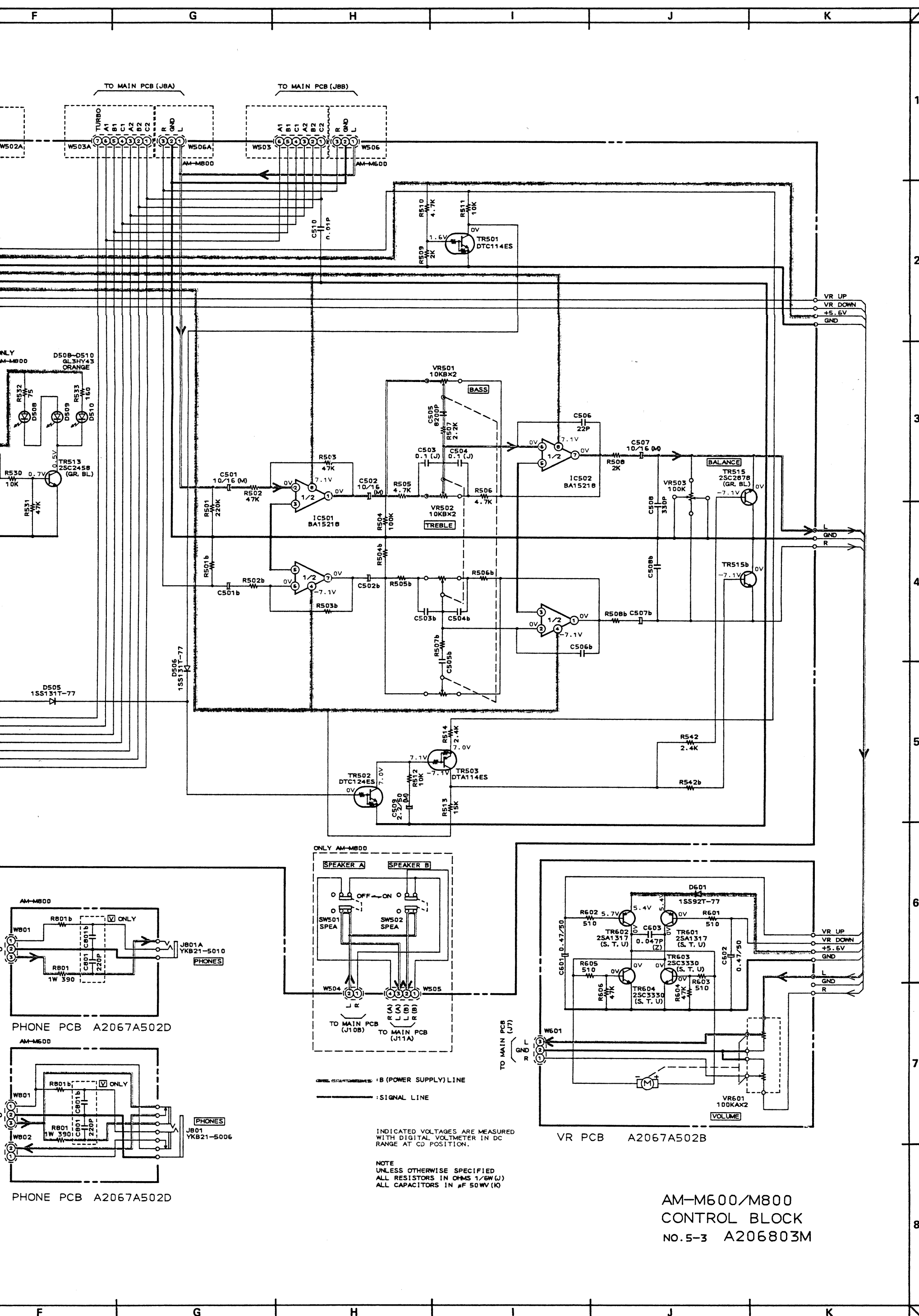


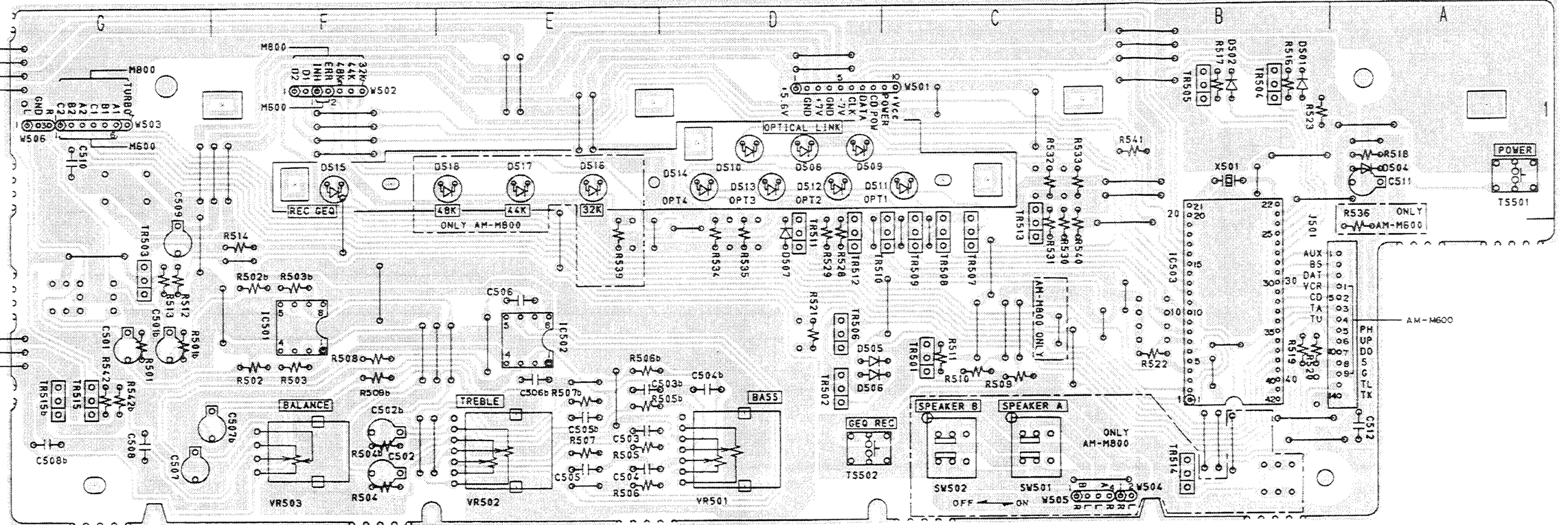
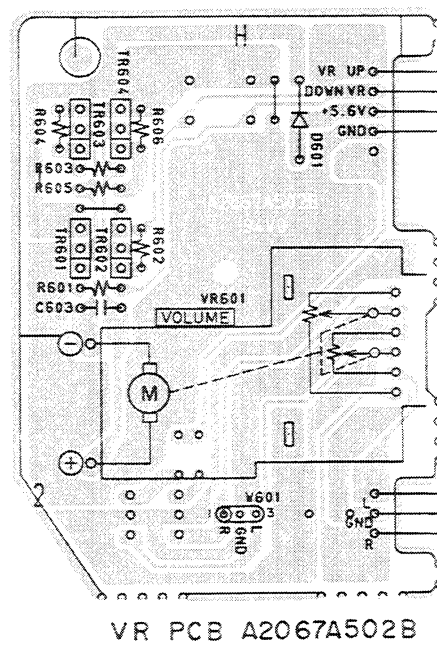
A2067A501A

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FACTURER'S
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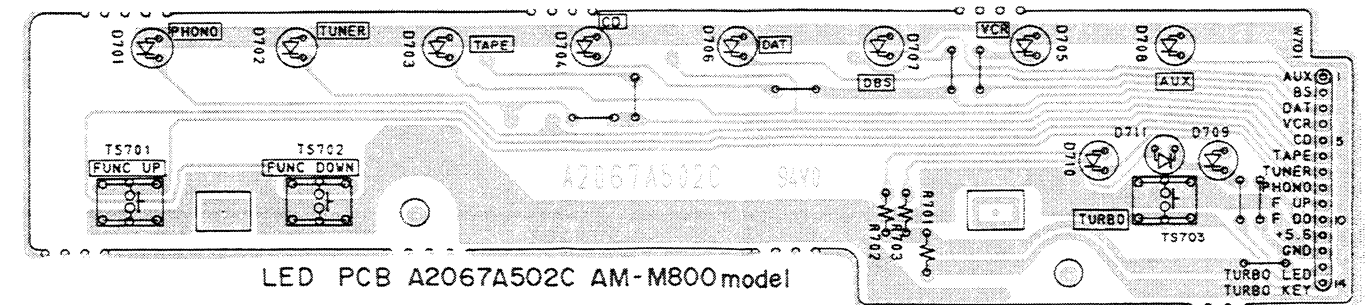
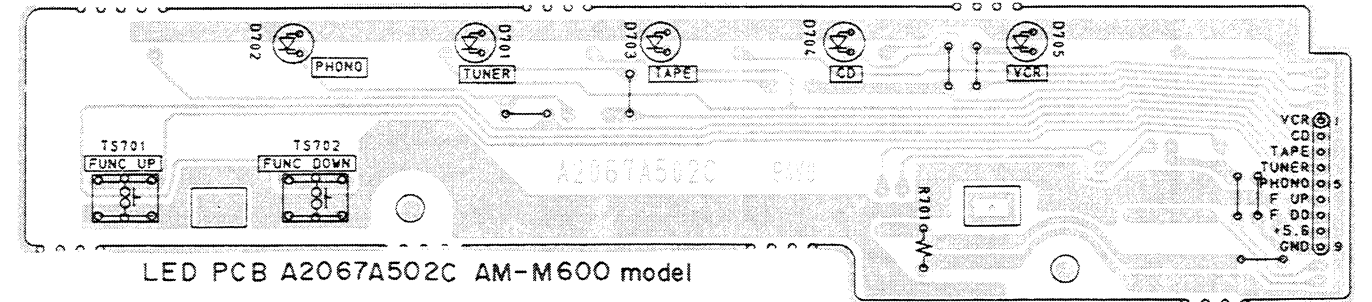
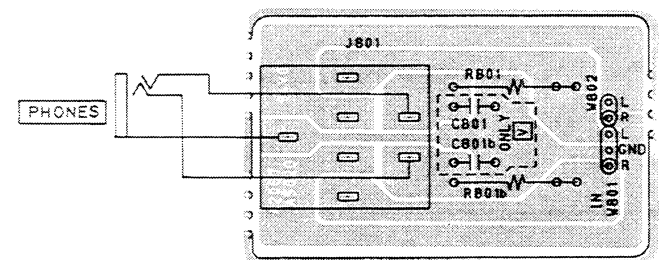
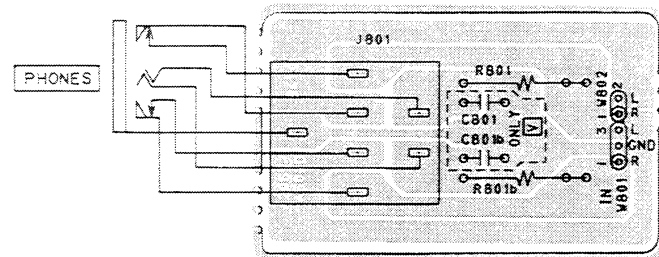






PRINCIPAL PARTS LOCATION

| ICS | TRANSISTORS |
|----------------|---------------|
| IC501.....F2 | TR501.....C2 |
| IC502.....E2 | TR502.....D2 |
| IC503.....B2 | TR503.....G2 |
| CONNECTOR | |
| J501.....A2 | TR504.....B1 |
| | TR505.....B1 |
| | TR506.....D2 |
| WIRES | |
| W501.....C, D1 | TR507.....C1 |
| W502.....F1 | TR509.....C1 |
| W503.....G1 | TR510.....C1 |
| W504.....B2 | TR511.....D1 |
| W505.....C2 | TR512.....D1 |
| W506.....G2 | TR513.....C1 |
| | TR514.....B2 |
| | TR515.....G2 |
| | TR515b.....G2 |



PRINCIPAL PARTS LOCATION

TRANSISTORS

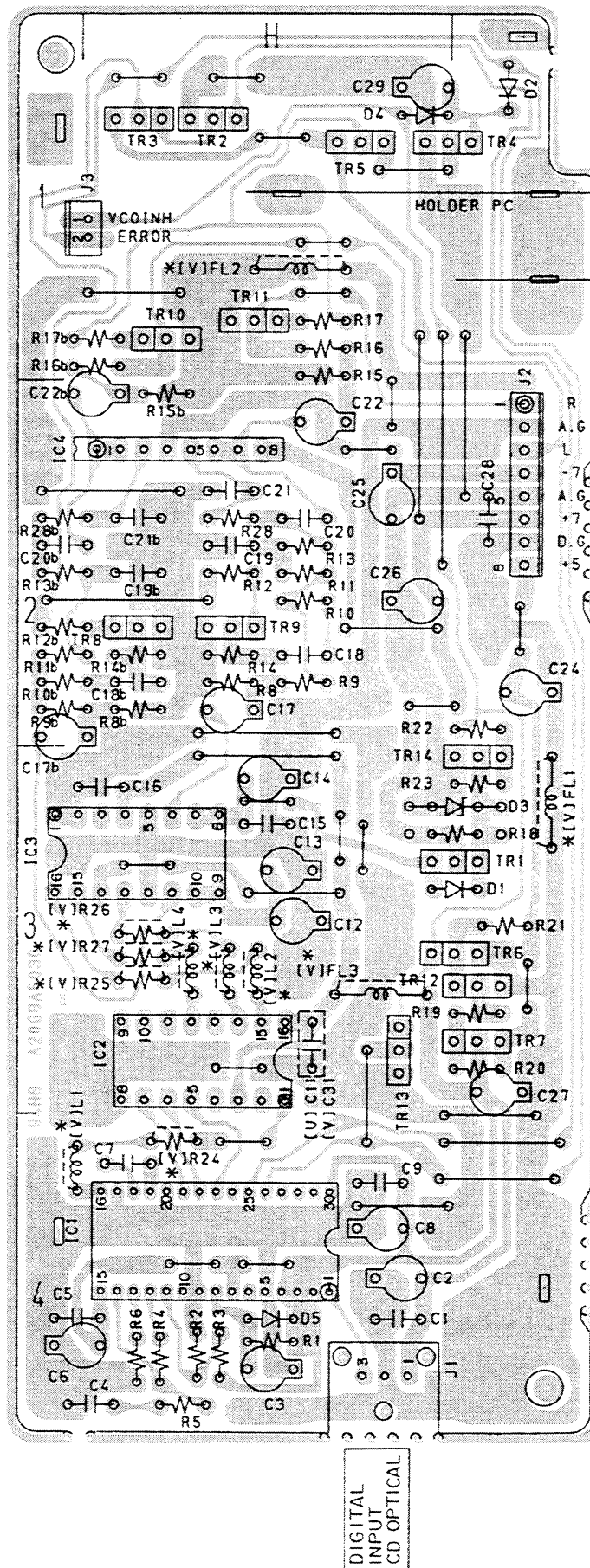
TR1.....A3
 TR2.....B1
 TR3.....B1
 TR4.....A1
 TR5.....A1
 TR6.....A3
 TR7.....A3
 TR8.....B2
 TR9.....B2
 TR10.....B1
 TR11.....B1
 TR12.....A3
 TR13.....A3
 TR14.....A3

ICS


IC1.....B4
 IC2.....B3
 IC3.....B3
 IC4.....B2

CONNECTORS

J1.....A4
 J2.....A2
 J3.....B1



DAC-A PCB A2068A5030

* Indicated ---are  model only

PRINCIPAL PARTS LOCATION

TRANSISTORS

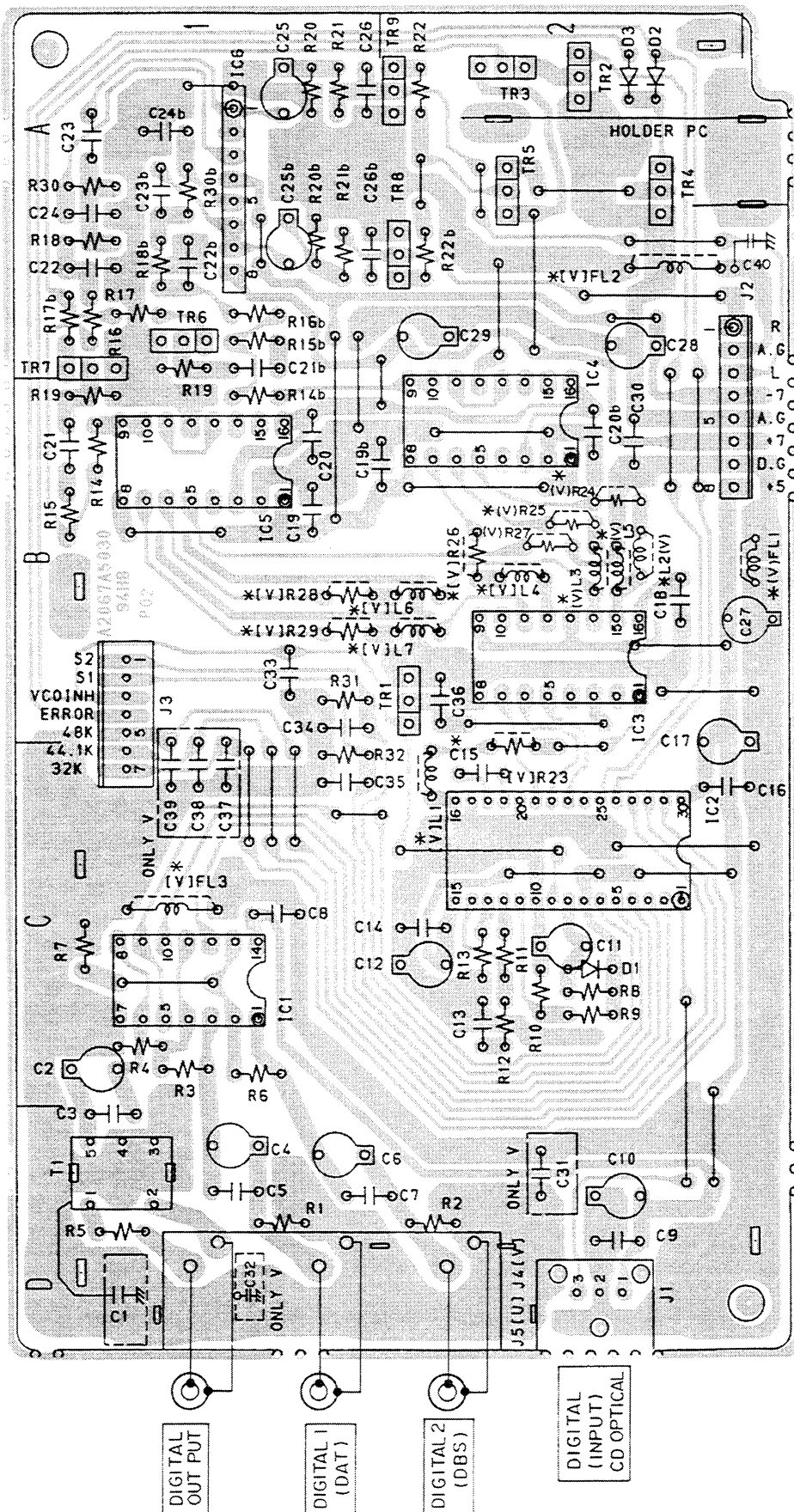
TR1.....B2
 TR2.....A3
 TR3.....A3
 TR4.....A2
 TR5.....A2
 TR6.....A1
 TR7.....A1
 TR8.....A2
 TR9.....A2

ICS

IC1.....C1
 IC2.....C2
 IC3.....B2
 IC4.....B2
 IC5.....B1
 IC6.....A1

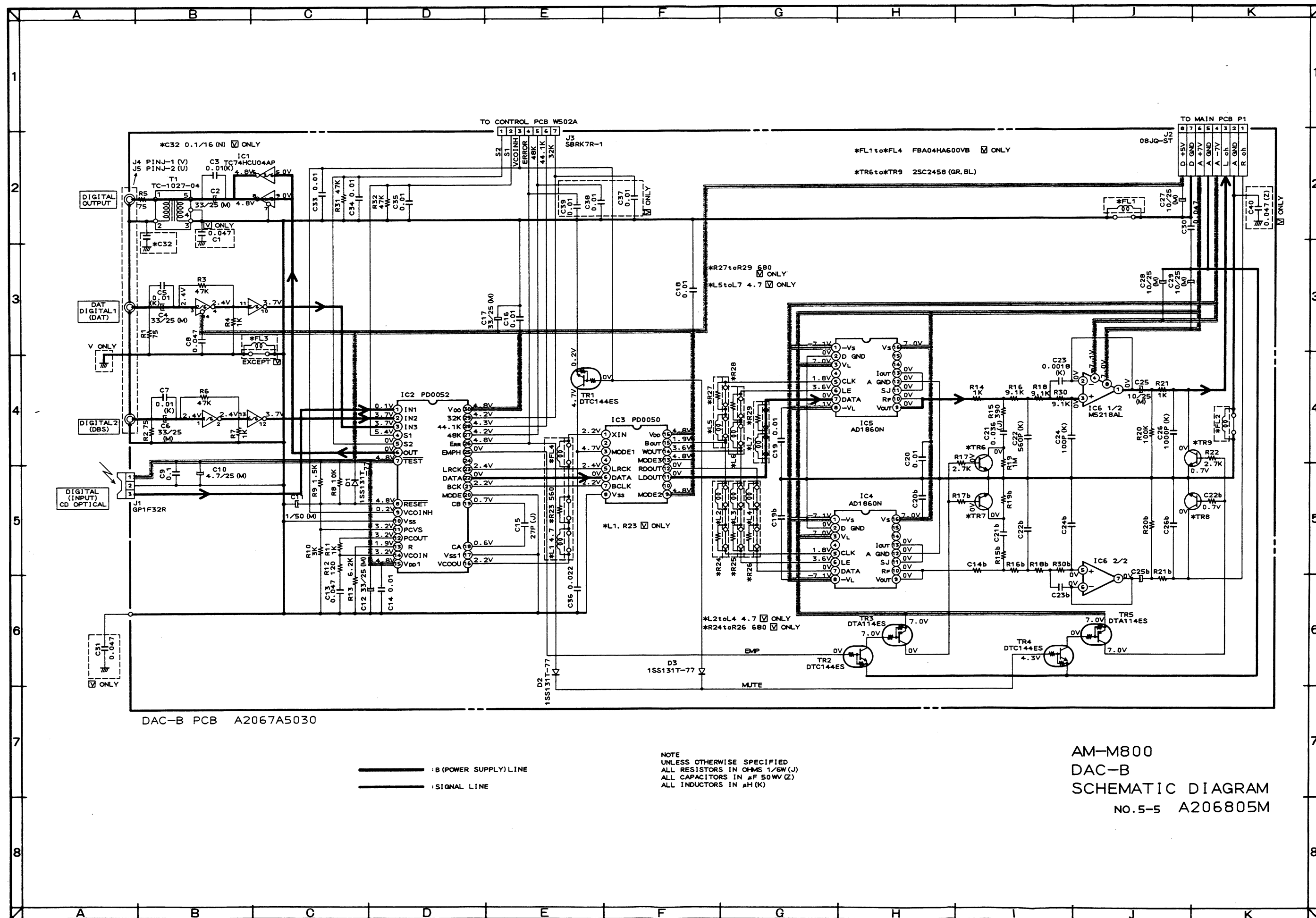
CONNECTORS

J1.....D2
 J2.....A,B2
 J3.....B,C1
 J4.....D1,2
 J5.....D1,2

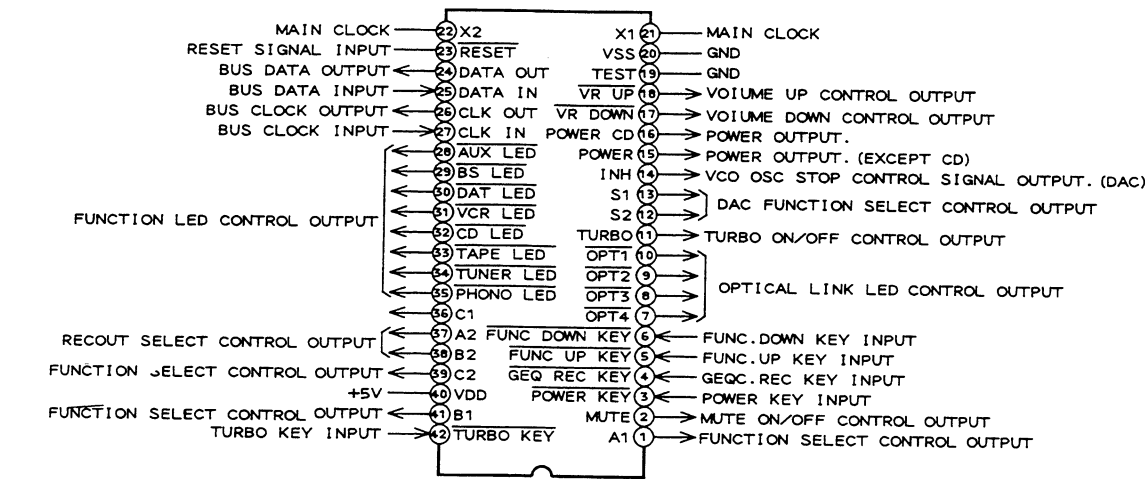


DAC-B PCB A2067A5030M1

* Indicated --- are [U] model only



LC6520-4318 (MI-CON)



PD0050 (Over Sampling Digital Filter)

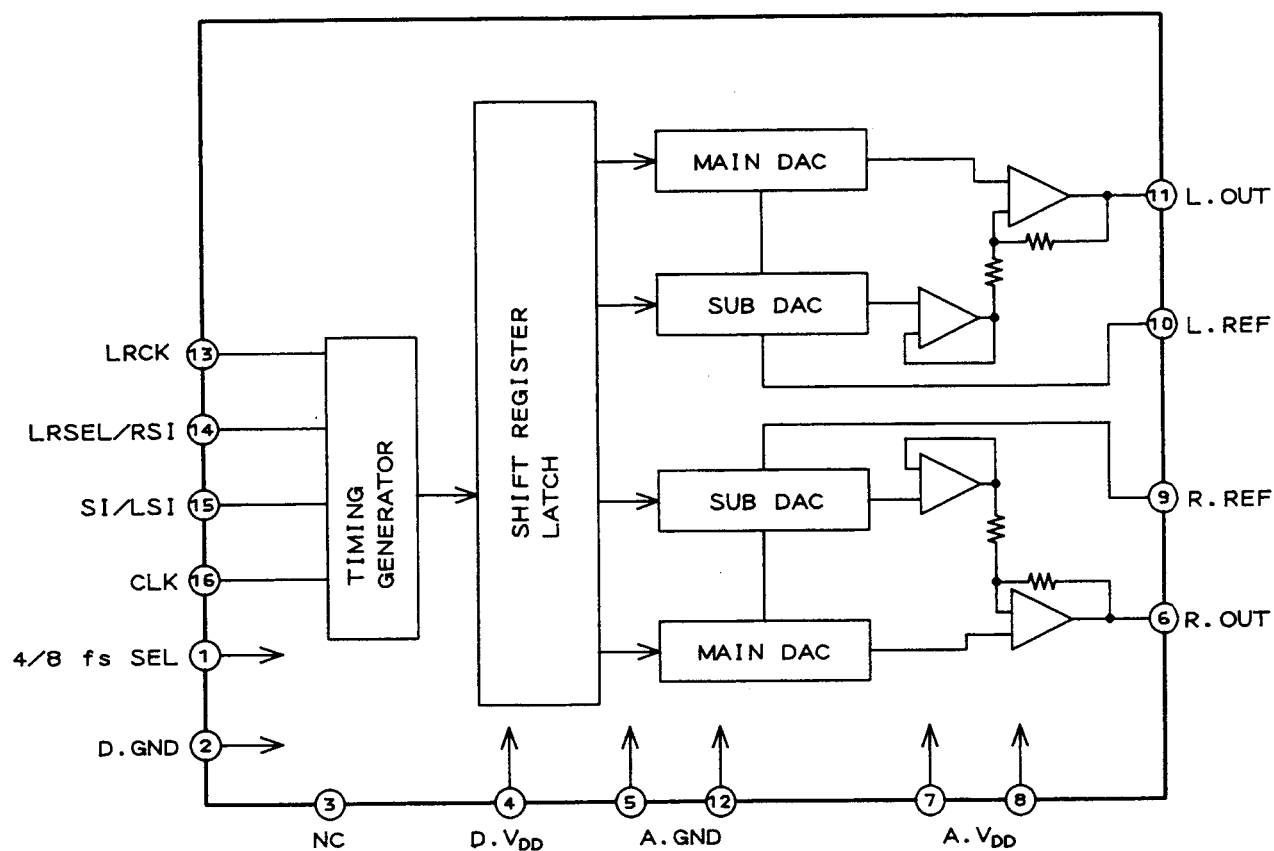
| PIN NO | SYMBOL | I/O | FUNCTION |
|--------|--------|-----|--|
| 1 | X IN | I | X'tal OSC Input |
| 2 | X OUT | O | X'tal OSC Input |
| 3 | MODE 1 | I | H: 16.9344 MHz L: 8.4672 MHz |
| 4 | CK OUT | O | MODE 1 (H): 16.9344 MHz Clock out. MODE 1 (L): 8.4672 MHz Clock out |
| 5 | LRCK | I | LRCK Input |
| 6 | DATA | I | Serial DATA Input |
| 7 | BCLK | I | BCK Input |
| 8 | VSS | — | —B (OV) |
| 9 | MODE 2 | I | H: 18 bit DATA Output L: 16 bit DATA Output |
| 10 | SH OUT | O | Sampling Hold Pulse out |
| 11 | LD OUT | O | DATA OUT (Lch) |
| 12 | RD OUT | O | DATA OUT (Rch) |
| 13 | MODE 3 | I | MODE 3 (H): MODE 3 (L): 20 bit DATA out |
| 14 | W OUT | O | Word Clock out |
| 15 | B OUT | O | LD OUT, RD OUT |
| 16 | VDD | — | +B (+5V) |

PD0052 (Digital Audio Interface Receiver)

| PIN NO. | SYMBOL | I/O | DESCRIPTION |
|---------|---------|-----|---|
| 1 | IN 1 | I | Digital Audio Interface signal input. |
| 2 | IN 2 | I | |
| 3 | IN 3 | I | |
| 4 | S 1 | I | Input select 1. |
| 5 | S 2 | I | Input select 2. |
| 6 | OUT | O | Data output. |
| 7 | TEST | I | TEST MODE input. |
| 8 | RESET | I | Power "ON" Reset input. |
| 9 | VCOINH | I | VCO OSC Stop Control signal input. |
| 10 | VSS | — | GND |
| 11 | PCVS | I | External Resistor Connection Terminal for VCO. |
| 12 | PC OUT | O | Phase comperator output. |
| 13 | R | — | External Resistor Connection Terminal for VCO. |
| 14 | VCO IN | I | Control voltage input. |
| 15 | VDD 1 | — | +B (+5 V) |
| 16 | VCO OUT | O | VCO Output (384 fs) |
| 17 | VSS 1 | — | GND |
| 18 | CA | — | External Capacitor Connection Terminal for VCO. |
| 19 | CB | — | |
| 20 | MODE | — | GND |
| 21 | BCK | O | Bit clock output. |
| 22 | DATA | O | Data output. |
| 23 | LRCK | O | Data output. (H=L ch, L=R ch) |
| 24 | COPY | O | Copy inhibit information output. |
| 25 | EMPH | O | H: EMPHASIS |
| 26 | ERR | O | H: Parity Error, L= NO ERROR |
| 27 | 48 K | O | Sampling Frequency data output. L=active |
| 28 | 44.1 K | O | |
| 29 | 32 K | O | |
| 30 | VDD | — | +B (+5 V) |

SM5807EP (4fs Over Sampling Digital Filter)

| PIN NO. | SYMBOL | I/O | DESCRIPTION |
|---------|-------------------|-----|-----------------------------------|
| 1 | XT | I | X'tal OSC input. |
| 2 | \overline{XT} | O | X'tal OSC output. |
| 3 | \overline{CKSL} | I | H: 16.9344 MHz L: 8.4672 MHz |
| 4 | CKO | O | Clock output. |
| 5 | LRCK | I | Clock input. |
| 6 | D IN | I | Serial data input. |
| 7 | B CKI | I | Bit clock input. |
| 8 | VSS | — | GND |
| 9 | \overline{SCSL} | I | H: 192 fs L: 196 fs |
| 10 | DGR | O | R ch signal output. |
| 11 | DGL | O | L ch signal output. |
| 12 | D OUT | O | Serial data output. |
| 13 | WDCO | O | Control clock output. (352.8 kHz) |
| 14 | LRCKO | O | Control clock output. (176.4 kHz) |
| 15 | BCKO | O | Bit clock output. |
| 16 | VDD | — | +B (+5 V) |



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